



**2020 ANNUAL REVIEW**

**ENVIRONMENTAL PERFORMANCE**

**DEVELOPMENT APPLICATION SSD 5544**

Ampol Australia Petroleum Pty Ltd

2 Solander Street  
Kurnell NSW 2231

***Reporting Period: 1 January 2020 to 31 December 2020***

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## 1 INTRODUCTION

Caltex Refineries (NSW) Pty Ltd (Ampol) has prepared this Progress Report to comply with Condition D4 – Annual Review in accordance with the Development Consent for application SSD 5544 (dated 7 January 2014). Condition D4 of the Consent states:

*By 31 December 2014 and annually thereafter, or as otherwise agreed in writing by the Director-General, the Applicant shall review the environmental performance of the Development to the satisfaction of the Director-General. This review must:*

- a) Describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;*
- b) Include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against;*
  - The relevant statutory requirements, limits or performance measures/criteria;*
  - The monitoring results of previous years; and*
  - The relevant predictions in the EIS;*
- c) Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;*
- d) Identify any trends in the monitoring data over the life of the Development;*
- e) Identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and*
- f) Describe what measures will be implemented over the current calendar year to improve the environmental performance of the Development.*

This Report presents a summary of the activities undertaken over the past twelve months, the proposed works for the next twelve months and the analysis and review required in the Consent condition. This report is divided in three parts:

- Part 1 – Environmental performance of the Terminal and site development activities and a description of activities carried out as part of the demolition phase of the conversion project
- Part 2 – Environmental performance of Terminal operations activities
- Part 3 – Improvement plan and summary
- Appendix 1 – Status of Ampol actions arising from Independent Environmental Audits - SSD 5544 and SSD 5353 (IEA 2 September 2017 and IEA 1 April 2016)
- Appendix 2 – Environmental performance against active Consent Conditions

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## **PART 1 - ENVIRONMENTAL PERFORMANCE OF THE TERMINAL AND SITE DEVELOPMENT ACTIVITIES**

### **1.1 DEVELOPMENT SUMMARY**

The overall works program associated with the Development Approval is summarised on Table 1 below. This table includes the commencement date and completion date for each activity.

**TABLE 1- Overview of Activities in Development to Date**

<b>Activity</b>	<b>Start</b>	<b>Stop</b>	<b>Status</b>
Tank Farm Automation	July 2012	December 2014	Completed
Tank 613 - Jet Conversion	July 2012	December 2013	Completed
Tank 603 - Jet Conversion	July 2012	May 2014	Completed
Slop Recovery, Storage, Transfer & Injection Upgrade	July 2012	December 2014	Completed
Conversion Tank Bund Modifications	July 2012	June 2015	Completed
Dye, Stadis & Lubricity System	July 2012	September 2014	Completed
Tank 634 - Diesel Conversion	July 2012	April 2014	Completed
Tank 512 - Gasoline Conversion	July 2012	February 2014	Completed
Fire Water System Modifications	October 2012	December 2014	Completed
Electricity Consolidation for Terminal Operation	October 2012	December 2015	Completed
Plant and Instrument Air System	October 2012	April 2015	Completed
Potable Water Modifications	October 2012	March 2015	Completed
OWS System Management	January 2013	December 2014	Completed
Tank Miscellaneous Nozzle Replacement	June 2013	December 2014	Completed
A-Line Gasoline Filter	October 2013	December 2014	Completed
Tank 411 – Gasoline Conversion	October 2014	November 2015	Completed
Tank 413 – Gasoline Conversion	October 2014	March 2016	Completed

Tank 633 – Diesel Conversion	October 2014	June 2016	Completed
Demolition of Refinery Infrastructure	September 2015	January 2020	Completed
Construction, Filling and Capping of ACS Containment Cell	October 2017	31 March 2020	Completed

## 1.2 DEVELOPMENT ACTIVITIES DURING THE LAST TWELVE MONTHS

The Development activities conducted over the 2020 calendar year is summarised on Table 2 with descriptions of the activities, the associated potential environmental impacts with the controls provided in the following sub-sections. Included on this table is a summary of the potential environmental impacts which relate to the management plans prepared for the Development. Also included in the table are the actual number of incidents for each activity over the year.

**TABLE 2 - Development Activities in 2020**

Activity	Potential Environmental Impacts	Number of incidents
Application of final capping layers of the Asbestos Contaminated Soil (ACS) Containment Cell	Soils, Groundwater and Contamination, Water (Surface), Air Quality and Asbestos, Waste, Traffic	Nil

### 1.2.1 Tank Conversion

All remaining refinery conversion related works (tanks and infrastructure) were completed by June 2016.

At the completion of the conversion related works, the above-mentioned plans were superseded by the DPIE approved Demolition Management Plans. Refer to 1.4 for Management Plans details.

Note: All approved and named Management Plans are published on the Ampol Public Website, in accordance with the Development Approval requirements. The website can be accessed via:

[Ampol Environment](#)

### 1.2.2 Demolition of Refinery Infrastructure Status

Demolition of the refinery infrastructure commenced in September 2015 and concluded in 2019. Approved demolition activities included the dismantling and removal of the aboveground redundant refinery process units, tanks, pipelines, buildings, and other structures including ships/heat-exchangers, piping and valve, pumps and compressors and underground pipes and services. This required the felling of structures, cutting of ships, piping

and support structures and the excavation of underground pipework. Pipelines from the refinery to the old Continental Carbon site and Tabbigai Gap were also removed, along with sections of pipeline from the Ampol wharf, Rights of Way and at Silver Beach.

The following table shows progress and completion for the approved demolition scope of works:

**TABLE 3 – Detailed Demolition Activities in 2020**

Activity	% complete
Civil Work & Buildings	100%
Tank Cleaning	100%
Demo Tanks & Pipeways	100%
Pipeway Contaminated Soil Removal to Cell	100%
Process Plant Demolition	100%
<b>Overall % Completed against Demolition Scope</b>	<b>115%*</b>

\*Additional Scope = 115%

Details of demolition activities completed in 2020 are as follows;

#### **Refinery Process Units and Associated Infrastructure**

Nil

#### **Pipelines/Pipeways**

Nil

#### **Asbestos Contaminated Soils (ACS) Containment Cell & Pipeway Contamination Removal:**

- The final capping layers (sub grade material and topsoil) of the ASC Cell and subsequent seeding/planting with native grasses was completed in the first quarter of 2020.

The Demolition phase of the conversion of the Kurnell refinery to a finished product import and distribution Terminal concluded on 31 March 2020.



### 1.3 ENVIRONMENTAL MANAGEMENT CONTROLS

The activities completed during the 2020 calendar year involved the implementation of the controls and performance indicators documented in the following approved Demolition environmental management plans:

- Air Quality Management Plan
- Noise (and Vibration) Management Plan
- Waste (and Resource) Management Plan
- Soil and Water Management Plan
- Biodiversity (and Weed) Management Plan
- Traffic Management Plan

Note that **nil** amendments to the above-mentioned Management Plans were required during the 2020 reporting period as part of the Contaminated Soil Containment Cell approval (SSD5544 MOD 2).

These Management Plans remained in place for the duration of the remaining demolition activities i.e. application of the final capping layers of the ACS Containment Cell. Included in these management plans are performance indicators and monitoring requirements.

The requirements detailed in the Kurnell Terminal Stage 1 Interim Operational Environmental Management Plan (OEMP) applied to all aspects of site operations for the remaining period of 2020.

### 1.4 DEVELOPMENT ACTIVITIES FOR NEXT (2021) CALENDAR YEAR

The Demolition phase of the conversion of the Kurnell refinery to a finished product import and distribution terminal concluded on 31 March 2020. Therefore, there are no activities planned for 2021.

At the conclusion of the conversion from the Kurnell refinery to a finished fuel product import and distribution Terminal has concluded, the Terminal's OEMP and the Management Sub Plans that had been shared with the Demolition project were reviewed and amended.

The following Management Sub Plans are considered relevant to the ongoing Terminal operations, as referenced in D2 (d):

- Air Quality Management Plan (Condition C28);
- Water Management Plan (Condition C12);
- Noise Management Plan (Condition C22);
- Traffic Management Plan (Condition C36);
- Waste Management Plan (Condition C40);
- Biodiversity Management Plan (Condition 42); and,
- Pest, Vermin & Noxious Weed Management (Condition C43).

These revised Management Sub Plans have been incorporated into the Kurnell Terminal Stage 2 Final Terminal OEMP.

### **1.4.1 Air Quality Management Sub Plans**

The Air Quality Management Sub Plan aims to meet the following objectives:

- Implement all reasonable and feasible dust and odour mitigation measures to prevent and minimise odour and dust emissions from operations;
- Prevent and minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events;
- Minimise any visible off-site air pollution;
- Minimise surface disturbance of the Site, other than as permitted under this consent and Site's Environment Protection Licence 837 (EPL 837);
- Manage the community expectations regards the prevention of air quality impacts to their amenity

The key monitoring requirements for air quality are:

- Odour screening of excavated material
- Terminal Operations and contractor will carry out regular visual monitoring to identify equipment producing excessive visible emissions
- Terminal Operations and contractor will carry out regular visual monitoring to identify any area/s generating dust
- In the event of an odour complaint, an evaluation will be undertaken to confirm that the site is not a potential source of odours. If site operations and/or contractor work is confirmed as a potential ongoing odour source additional mitigation measures will be implemented which will include the use of water sprays to suppress odours and, if necessary, the use of odour suppressants. In the event of ongoing odours, the source activities activities will be stopped
- Continued dust monitoring during activities/area/s with potential to generate dust

### **1.4.2 Noise Management Sub Plans**

The Noise Management Sub Plan aims to meet the following objectives:

- Prevent and minimise high noise generating activities during all operation (within safety limitations) at the Kurnell Terminal (the 'Site'), Wharf and associated pipeline operations as well as other project works (as defined in Kurnell Terminal OEMP, Chapter 1 Introduction)
- Manage community expectations regarding noise emissions
- Compliance with the Site's Environment Protection Licence 837 (EPL 837) noise limits and relevant guidelines
- Compliance with Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs)
- Compliance with relevant regulatory requirements (identified in the Kurnell Terminal OEMP, Appendix D)
- Works only carried out within the required hours and noise complaints managed in accordance with the Noise Management Plan requirements.

Noise monitoring must be undertaken at the commencement of any work that has the potential to generate noise that could exceed the Noise Criteria Management Levels at the nearest sensitive receiver and the nearest sensitive down-wind receiver.

The key noise monitoring requirements are:

- SoundScience
- At the beginning of undertaking any high noise generating activities (i.e. paint removal, demolition or metal fabrication) in close proximity (100m) to a specified receptor (R1-R8), measures noise monitoring will be carried.
- If high noise generating works are shown to exceed the required noise limits, or if noise complaints are received related to the high noise work, additional mitigation will be implemented for these activities (to ensure compliance with the required noise limits). These additional mitigations measures include:
  - The substitution of equipment or change the work procedure.
  - Acoustic screening.
  - Implement periodic breaks in undertaking high noise generating works. For example, working for 3 hours and stopping for 1 hour.
  - If noise complaints are received which are determined to be not associated with high noise generating work but do relate to the Project, additional mitigation measures should be undertaken, or noise monitoring undertaken.
  - Noise monitoring must be undertaken at the nearest residential sensitive receiver to the source of noise and at the nearest residential sensitive receiver downwind from the source. Thus, monitoring locations will vary dependent of any source of noise and the wind direction.

**Note:** Refer to Noise Management Plan for specific mitigation measures for shipping noise management.

#### **1.4.3 Waste (and Resource) Management Sub Plans**

The Waste Management Sub Plan aims to meet the following objectives:

- Minimise the potential for impacts of waste generated as a result of the Terminal operations ("the Site") and maximise the reuse and recycling of waste materials produced wherever possible; and
- The disposal of waste materials to landfill is considered as the last resort where all other avenues have been investigated
- Store, handle, transport, and dispose of waste in an environmentally responsible manner that does not cause harm or contamination to soil, air or water
- Compliance with the Site's Environment Protection Licence 837 (EPL 837) pertaining to waste management and relevant guidelines
- Compliance with Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs)

- Compliance with relevant regulatory requirements (identified in the Kurnell Terminal OEMP, Appendix D)
- Manage community expectations around the responsible disposal of wastes
- No litter present on or around work areas

The key monitoring requirements for waste management are:

- Terminal operations and contractor activities to follow established waste segregation procedures to prevent cross contamination of the waste streams
- consider waste reduction strategies and existing controls as part of developing work methods, undertaking Job Safety Analysis and issuing PTW
- Terminal operations to carry out inspections of its works areas to ensure any wastes, chemicals and hazardous materials are appropriately stored and all required procedures are being implemented by contractors

#### **1.4.4 Soil and Water Management Sub Plans**

The Soil and Water Management Sub Plan aims to meet the following objectives:

- Minimise the potential for impacts to surrounding water bodies and groundwater as a result of the Terminal's operations ('the Site') which includes the Right of Ways (ROW) and wharf areas;
- Describe the water management system on the site including both; storm water and oily water systems;
- Describe the potential soil and water issues associated with Terminal operations;
- Include measures for management soils that are excavated and stockpiled on Site;
- Identify water management and monitoring requirements for the Site;
- Demonstrate compliance with EPL 837 and prevent pollution of waters and soil at all times as well as other relevant regulatory requirements (identified in the Kurnell Terminal OEMP, Appendix D)

The key monitoring requirements for soil and water management are:

- Work Permits must be issued prior to work in areas where potential soil and groundwater contamination exists or is suspected - asbestos, ASS, etc.
- All stockpiles managed in accordance with the controls and mitigation measure detailed in the Plan
- Inspection of all stockpiles for erosion
- Inspection of stormwater drains down gradient of work areas if erosion of stockpiles is observed
- No environmental pollution incidents
- Sampling of all excavations for asbestos and visual and olfactory screening for hydrocarbons, using a PID where appropriate
- Quarterly groundwater monitoring
- No significant increase in COPC levels in groundwater

#### **1.4.5 Biodiversity (including Pest, Vermin & Noxious) Management Sub Plans**

The Biodiversity, Weed and Pest Management Sub Plan aims to meet the following objectives:

- Minimise the potential for impacts to flora and fauna as a result of the Terminal's operations ('the Site') which includes the Right of Ways (ROW) and wharf areas;
- To provide an integrated approach to the management of pests, weeds and vermin on the Site
- Compliance with the Southern Shire Council pest management requirements
- Compliance with the Site's Environment Protection Licence 837 (EPL 837), as applicable to the use of chemicals, such as pesticides and herbicides, etc.
- Compliance with Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs).
- Compliance with relevant regulatory requirements (identified in the Kurnell Terminal OEMP, Appendix D)
- Manage community expectations regards protecting the Marton Park Woodlands and Wetlands, as well as other remanent native bushland for which the Site is responsible for (custodian)

The key monitoring requirements for biodiversity, weed and pest management are:

- Undertake pre-works inspections for frogs in excavations or work areas and take appropriate actions if observed.
- undertake pre-works inspections for nesting shorebirds in work areas and take appropriate actions if observed
- Ensuring suitably qualified personnel are engaged to carry out the necessary pest (included vermin) and weed removal/mitigation activities, in line with the Pesticides Act 1999 and Pesticides Regulation 2017
- Suitable equipment, facilities, training, work practices and other necessary precautions will be taken to minimise impacts to the environment and the risk of pollution.

#### **1.4.6 Traffic Management Sub Plan**

The Traffic Management Sub Plan aims to meet the following objectives:

- No collisions caused by vehicles moving around site operations (including carpark areas)
- No vehicles incidents associated with Site access

The key monitoring requirements for traffic management are:

- Only permitting those vehicle deemed necessary to enable work to be undertaken in the operational areas of the Site
- Only allowing diesel driven vehicles into the operational areas of the Site
- Employees and contractors have been inducted and have a valid driver's licenses to be able to drive into the operational areas of the Site

- Provision of sufficient parking facilities on-site for employee and contractor personnel, and heavy vehicles, to ensure that operational traffic associated with Site operations and any project works do not utilise public and residential streets or public parking facilities.
- Within the operational areas of the Site, vehicles will travel on designated roads where possible and be limited to a maximum speed of 10 km/hr in off-road areas, and 25 km/hr elsewhere, except cranes movements to be restricted to 15kms/hr.
- Provision of appropriate signage around the Site to communicate:
  - the speed limit,
  - parking locations within and outside the operational areas of the site,
  - “no Parking” areas,
  - “No Access” areas
  - designated traffic routes within and outside the operational areas
  - road names or numbers within the operational areas

#### **1.4.7 Asbestos Contaminated Soil Containment Cell (ACSCC)**

The Asbestos Contaminated Soil Containment Cell (ACSCC) has specific management plans that were developed in 2020, as part of MOD2 requirements. They are:

- Long Term Environmental Management Plan

**Note:** At time of this report, the final draft LTEMP is being reviewed by the Site Auditor. It will not be available until early 2021. The LTEMP is included as an appendix to the Stage Two Final Kurnell Terminal OEMP.

As communicated to DPIE, the submission of the Stage 2 Final OEMP incorporating the approved LTEMP will also be delayed.

### **1.5 ENVIRONMENTAL PERFORMANCE AND MONITORING**

The management plans prepared for this Development incorporate the mitigation measures specified in the EIS for Conversion and SEE for Demolition. Each management plan contains management actions, performance indicators and monitoring requirements.

A summary of the relevant management plan for each activity undertaken in the last twelve months, with potential environmental impacts, is presented in Table 5.

**TABLE 5 - Performance against Performance Indicators per Activity**

**Note:**

The removal of asbestos contaminated soil from the pipeways concluded in 2019 with the first of the top layers of the containment cell started. Therefore, the only activity in 2020 was the completion of the top layers - includes seeding and planting of native grasses

Activity	Environment Aspect	Environment Impact	Performance Indicator	Monitoring Results	Non-Conformances
Demolition Activities	Top Layer Capping - includes seeding and planting of native grasses	Air Quality management	<p>No air quality complaints received pertaining to the Cell.</p> <p>No visible emissions of dust from the premises</p>	<p>Dust suppression measures as part of daily work</p> <p>Regular visual monitoring to identify any area/s generating dust.</p> <p>Weekly work area inspections and monthly environmental inspections undertaken – nil non-conformances identified</p>	Nil non-conformances

Activity	Environment Aspect	Environment Impact	Performance Indicator	Monitoring Results	Non-Conformances
Demolition Activities – Mod 2 ACS Cell Project	ACS Containment Cell  Top Layer Capping - includes seeding and planting of native grasses  (continued)	Air Quality management	No air quality complaints received pertaining to the Cell.  No visible emissions of dust from the premises	Regular visual monitoring to identify any area/s generating dust.  Weekly work area inspections and monthly environmental inspections undertaken – nil non-conformances identified	No non-conformances
		Soil and Water management	Prevention of top layer soils/materials runoff from ACS Cell  Truck wash station for all plants leaving work zone	Stormwater and groundwater managed on-site without off-site impact	No non-conformances
		Traffic Management	No collisions caused by demolition work vehicles  No vehicle incidents associated with site access	No motor vehicle incidents reported on site or off site in 2020  Nil speed limit exceedence notes issued by Demolition team leads or Ampol Security team	No non-conformances



## **1.6 DEMOLITION PROJECT - ENVIRONMENTAL NON-COMPLIANCE AND CORRECTIVE ACTION**

The activities undertaken during the first quarter of 2020 had relatively low potential for the generation of environmental impacts. The activities with the highest potential for impacts were:

- application of final layers (capping) of the ACS Containment Cell
- seeding and planting of native grasses on the ACS Containment Cell

As reported in the 2019 Annual Report, the ACS Containment Cell Asbestos air monitoring units and the dust deposition monitoring units (DDU) and site boundary DPU monitoring points were removed at the end of 2019 once the construction of the top layer commenced.

NIL environmental exceedances or consent condition non-compliances associated with demolition activities occurred during the 2020 reporting period.

## **1.7 DATA TREND ANALYSIS**

A review of the available data shows that:

- All working hours have been in line with the conditions of consent (C18)
- All high noise generating construction works have been confined to less sensitive times of the day in accordance with conditions of consent (C17)
- Monitoring during this reporting period indicates that the development works have nil observable impact on the air quality in the surrounding Kurnell community

## **1.8 DATA DISCREPANCIES**

The management actions within the management plans were developed from the mitigation measures in the EIS for Conversion and SEE for Demolition. Based on the performance of the development activities over the last twelve months, the management actions appear to be appropriate for this project. There were no discrepancies identified over the past year and no need to adjust or change the Demolition EMP or any of the management plans.

## **1.9 SURRENDER OF EXISTING DEVELOPMENT CONSENTS**

In accordance with the requirements of Application No. SSD5544 and Clause 97 of the NSW EPA Regulation, the existing Development Consents were surrendered in 2016 to the issuing Authority, as detailed in conditions:

- B9 and Appendix B;
- B10

The issuing Authorities of the DAs in question were:

- Department of Planning and Environment
- Sutherland Shire Council

## **PART 2 - ENVIRONMENTAL PERFORMANCE OF TERMINAL OPERATIONS ACTIVITIES**

### **2.1 TERMINAL OPERATIONS DURING THE PREVIOUS CALENDAR YEAR**

The Terminal continues to be a major supplier of transport fuel to NSW. In 2016 the operational control of the pipeline between Kurnell and Newcastle transferred from Banksmeadow Terminal to Kurnell Terminal. The Sydney to Newcastle Pipeline continues to operation without incident. The Terminal continues to operate the site's Wastewater Treatment Plant, which provides primary and secondary treatment, discharging treated aqueous effluent within licence conditions.

There was one treated injury attributed to Terminal operations in 2020. Details are:

#### **INC-0019571 - April 2020.**

A worker knelt to grab their dropped paperwork. In doing so reached out and slightly twisted his knee. He felt a twinge and then his right knee gave way.

Corrective Action/s:

Caltex Injury Assist was contacted, and the operator received first aid. Modified duties were required.

Confirmed that the worker received on-boarding training as to the requirement to complete a Safe Performance Self-Assessment (SPSA) when conditions and task change.

Liaised with relevant Caltex and Manpower personnel to ensure that the requirements for pre-employment health assessments for contingent labour are confirmed and understood by all parties.

### **2.2 TERMINAL ENVIRONMENTAL MANAGEMENT CONTROLS**

The Terminal operations are governed by a comprehensive Environment Management System in line with the Ampol Operational Excellence Management System (OEMS). The site is also certified against ISO14001:2015.

The site achieved recertification against ISO9001:2015 QMS and 14001:2015 EMS in May 2020 (certified by Lloyds Register) with nil non-compliances identified.

Details of the three surveillance visits and recertification audit specific to the EMS Standard are as follows:

<b>2018-2020 Audit Dates</b>	<b>ISO14001:2015 Findings</b>	
	<b>No. of Non-Conformance (NC)</b>	<b>Opportunities for Improvement Identified (OFI)</b>
SV1 - 16 to 8 May 2018	One minor NC	Five
SV2 - 20 to 22 November 2018	Nil	Nil

SV3 – 03 to 03 September 2019	Nil	Nil
Recertification Audit (via RAM) 12 – 14 May 2020	Nil	Nil

Notes:

1. The minor NC identified in the May 18 audit has been actioned and closed out.
2. The Lloyds Register ISO14001 reports are available on request.

The Terminal's *Stage 1 Interim* Operational Environment Management Plan (OEMP) is supported by the Ampol Environment Policy, the Environmental Management elements of Ampol OEMS, and the ISO14001:2015 Standard. The Kurnell Terminal OEMP documents the relevant environmental information, legal requirements and risk controls pertaining to the terminal operations, as well as the remaining elements of the demolition and other key projects.

In line with DPIE requirements, the *Stage 2 Final OEMP* (incorporating the draft ASC Cell LTEMP) was submitted to the DPIE in February 2020. The DPIE provided feedback in April 2020, requesting minor changes/additions and a copy of the final ASC Cell LTEMP, as approved by the Site Auditor, in accordance with the requirements of Condition C53.

Although the amendments to the OEMP have been completed, submission of the amended *Stage 2 Final OEMP* has been delayed several times during 2020. This is due to the availability of the approved ASC Cell LTEMP. The DPIE has been notified of these delays and extended the submission deadline to mid-March 2021.

Key to the site's OEMP is the Environment Protection Licence (Lic №: 837). This licence describes the scheduled activities that are performed on the site, as well as the required controls and monitoring activities. The monitoring section of the site licence describes six Monitoring or Discharge Points. For details, see Table 6 below:

**TABLE 6 – Description of Kurnell Terminal EPL 837 Monitoring and Discharge Points**

EPA Identification No	Type of Monitoring or Discharge Point	Location Description
2	Discharge to waters	Submerged ocean outfall at Yena Gap labelled "2" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"  Note: Monitoring is undertaken at Point 27 for EPA ID No.2
15	Groundwater quality monitoring	Bioremediation plot (landfarm) – permanent monitoring well PWM 8 labelled "15" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"
16	Groundwater quality monitoring	Bioremediation plot – (landfarm) permanent monitoring well (PMW) 33 labelled "16" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"

EPA Identification No	Type of Monitoring or Discharge Point	Location Description
27	Effluent quality and volume monitoring	Sampling point in wastewater treatment plant labelled "27" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"  Note: Discharge from wastewater treatment plant at Point 2. (submerged ocean outfall at Yena Gap)
28	Groundwater quality monitoring	Pipe track 1- Asbestos Containment Cell – Permanent monitoring well labelled "28" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"
29	Groundwater quality monitoring	Causeway - Asbestos Containment Cell – Permanent monitoring well labelled "29" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points"

**Note:** All monitoring points are indicated on Plot Plan A1-18588 titled "Environment Protection Licence Identification Points", Version 6, dated 21 June 2018. Monitoring Points - refer to Appendix 3, Figure D.

Summaries of the monitoring results for each monitoring point are included in this Annual Review.

The pollutants monitored at these points; their licence concentration limits and monitoring results are presented in Section 2.3. The prevention of off-site noise, dust and offensive odours are licence and consent condition requirements. The site's performance against these requirements will also be discussed as part of the overview of the calls made to the 24 Hour Community Hotline in Section 2.3.

## 2.3 TERMINAL ENVIRONMENTAL PERFORMANCE AND MONITORING

In this section, a summary is provided of the environmental performance of the Terminal against its Environmental Protection Licence No 837 and the Conditions of Consent for SSD 5544:

- Table 7A-F shows the summary of monitoring results for the licenced monitoring points 15, 16, 28 and 29 for the calendar years 2015 -2020.
- Some of the data from Tables 7A-F has also been shown in Figures 1 to 4

**Please note:**

Monitoring Points 28 and 29 were created during 2018 and therefore only 3 years of data are available and depicted in Figures 3 and 4 respectively.

- Table 8 contains the annual summary of the monitoring results for Monitoring Point 27

- Table 9 contains a summary of the asbestos monitoring (air) results during asbestos removal activities during the period 2015-19. Airborne asbestos monitoring during soil removal from the pipe ways and subsequent placement into the Asbestos Contaminated Soil Containment Cell (ASC C/Cell) was an integral part of this air monitoring program. The air monitoring program ceased in December, following the closure of the ASC C/Cell
- Table 10 (A, B, C, D) contains a summary of asbestos monitoring, dust monitoring during high dust potential during demolition activities, as well as dust deposition monitoring at designated locations on site. Dust deposition monitoring was started in August 2015, with addition dust deposition units placed around the Asbestos Contaminated Soil (ACS) Contaminant Cell in 2018, during its construction period. The units specific to the ACS Containment were removed at the end of September 2019 once the placement of contaminated soils ceased and the capping of the ACS C/Cell was closed
- Table 11 and Figure 7 provide an overview of the calls made to the 24 Hour Kurnell Community Hotline

**TABLE 7A – Licenced Monitoring/Discharge Points: 2020**

Monitoring Period	2020								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	5.6	3.378	<0.001	<0.10	<0.05	<0.002
Highest	<0.001	<0.001	<0.001	5.7	4.265	<0.001	0.13	<0.10	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	5.8	1.565	<0.001	0.02	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	7.0	2.106	<0.001	0.20	<0.10	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7A – Continue**

Monitoring Period	2020								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
	Point 28, ACMW01								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	6.6	0.170	<0.001	<0.10	<0.05	<0.002
Highest	<0.001	<0.001	0.009	7.5	0.531	<0.001	0.50	<0.10	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Point 29, ACMW03								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	1.300	2.800	<0.001	6.2	2.201	6.500	49.92	<0.10	11.000
Highest	3.200	8.100	<0.001	7.0	2.938	18.000	110.70	0.13	43.000
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7B – Licenced Monitoring/Discharge Points: 2019**

Monitoring Period	2019								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	5.11	4.100	<0.001	<0.100	<0.050	<0.002
Highest	<0.001	<0.002	<0.001	5.70	4.937	<0.002	<0.100	<0.050	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	5.59	1.905	<0.001	0.040	<0.050	<0.002
Highest	<0.001	<0.002	<0.001	6.50	2.360	<0.002	0.290	<0.050	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



**TABLE 7B – Continue**

Monitoring Period	2019								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
	Point 28, ACMW01								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.001	<0.001	5.92	0.200	<0.001	0.700	<0.002	<0.002
Highest	<0.001	<0.002	<0.001	7.17	0.552	<0.002	1.500	<0.050	<0.003
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Point 29, ACMW03								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	1.700	6.710	<0.001	6.12	2.284	15.00	1.600	<0.050	34.40
Highest	3.700	9.200	0.002	6.56	2.392	16.00	106.3	0.120	43.00
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7C – Licenced Monitoring Points: 2018**

Monitoring Period	2018								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.29	3.56	<0.002	<0.05	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	6.75	4.66	<0.002	<0.05	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.8	1.74	<0.002	0.04	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	6.03	2.15	<0.002	0.18	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7C – Continue**

Monitoring Period	2018								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
	Point 28, ACMW01								
No. Samples Collected	3	3	3	3	3	3	3	3	3
Lowest	<0.001	<0.002	<0.001	5.30	0.300	<0.002	<0.100	<0.002	<0.002
Highest	<0.001	<0.002	<0.001	5.80	0.896	<0.002	<0.100	<0.002	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Point 29, ACMW03								
No. Samples Collected	3	3	3	3	3	3	3	3	3
Lowest	0.776	4.220	<0.001	6.05	2.178	11.100	2.690	<0.050	24.600
Highest	2.000	8.570	<0.001	6.46	2.202	18.100	49.890	0.120	41.500
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7D – Licenced Monitoring Points: 2017**

Monitoring Period	2017								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.36	3.555	<0.002	<0.050	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	6.75	4.173	<0.002	<0.050	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.8	1.742	<0.002	0.04	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	6.03	1.885	<0.002	0.18	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7E – Licenced Monitoring Points: 2016**

Monitoring Period	2016								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	4.54	3.169	<0.002	<0.050	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	5.31	3.895	<0.002	<0.050	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.22	1.500	<0.002	<0.050	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	5.85	1.845	<0.002	0.140	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**TABLE 7F – Licenced Monitoring Points: 2015**

Monitoring Period	2015								
Pollutant	Benzene	Ethyl Benzene	Lead	pH	Standing Water Level	Toluene	Total Petroleum Hydrocarbons	Total Phenolics	Xylene
Unit of Measure	mg/L	mg/L	mg/L	pH units	m	mg/L	mg/L	mg/L	mg/L
Licence Limit	None	None	None	None	None	None	None	None	None
Monitoring Frequency Required by Licence	Quarterly								
EPA Point	Point 15, PMW08								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	4.83	3.236	<0.002	<0.050	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	5.57	3.932	<0.002	0.055	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EPA Point	Point 16, PMW33								
No. Samples Collected	4	4	4	4	4	4	4	4	4
Lowest	<0.001	<0.002	<0.001	5.548	1.555	<0.002	<0.050	<0.05	<0.002
Highest	<0.001	<0.002	<0.001	5.900	1.814	<0.002	0.017	<0.05	<0.002
Exceedance (yes/no)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lowest and highest pH, Standing Water Levels and Total Recoverable Hydrocarbon levels have been depicted in Figures 1 to 4 for Monitoring Points 15, 16, 28 and 29 respectively. Results below the detection limit of the lab's analytical tests have not been depicted in a graph.

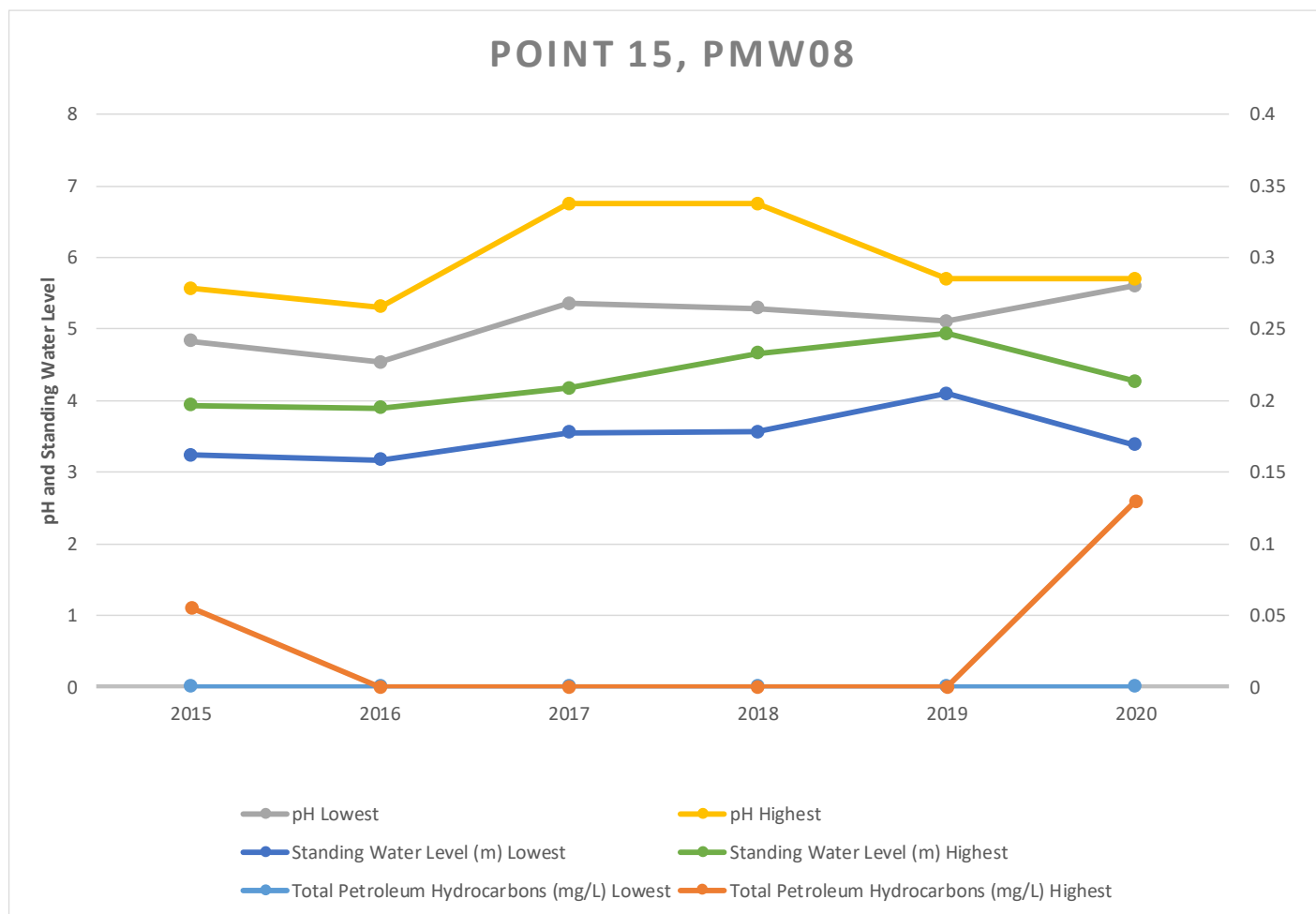


Figure 1. Monitoring Point 15 Data – 2015 to 2020

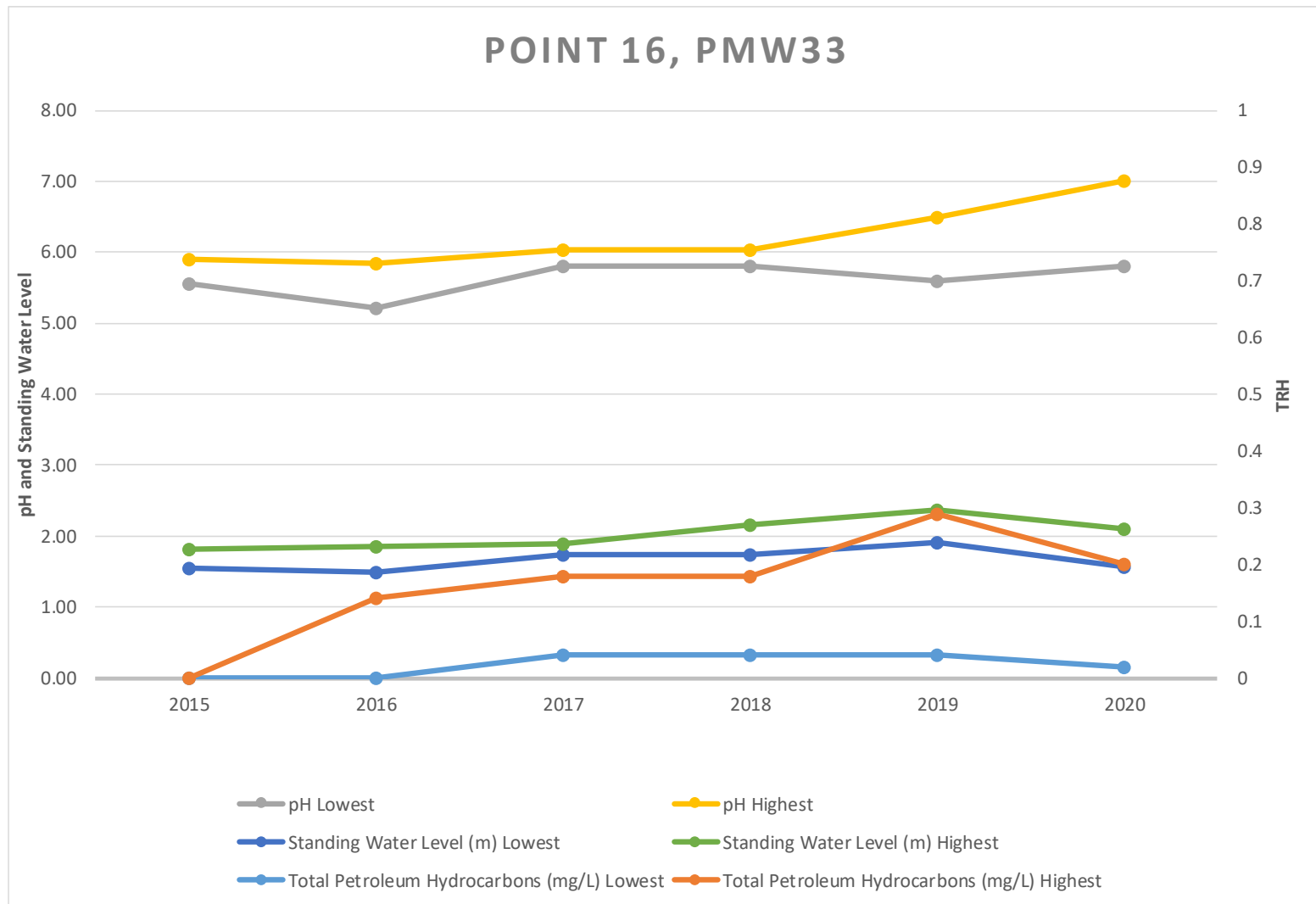


Figure 2. Monitoring Point 16 Data – 2015 to 2020



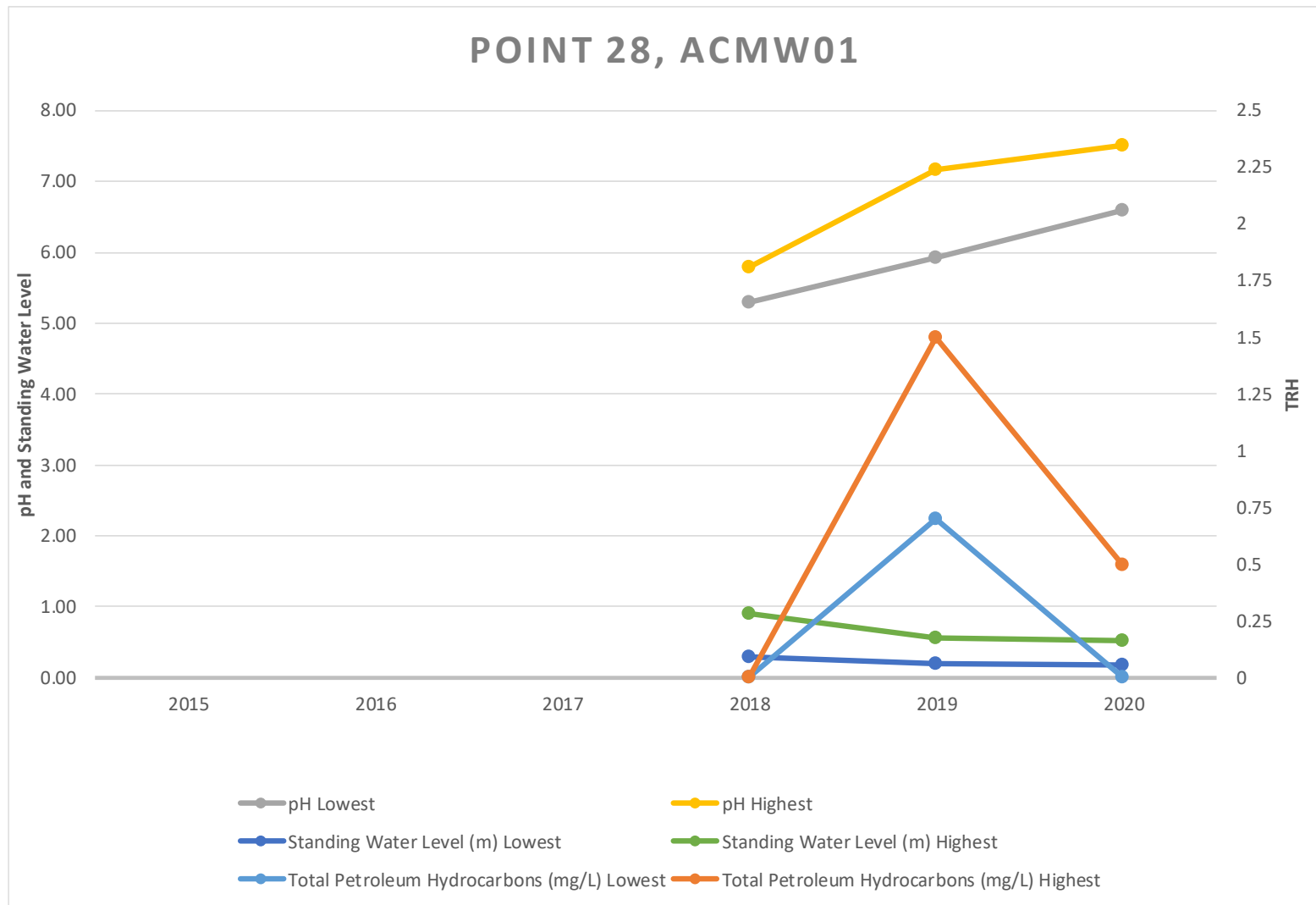


Figure 3. Monitoring Point 28 Data – 2015 to 2020

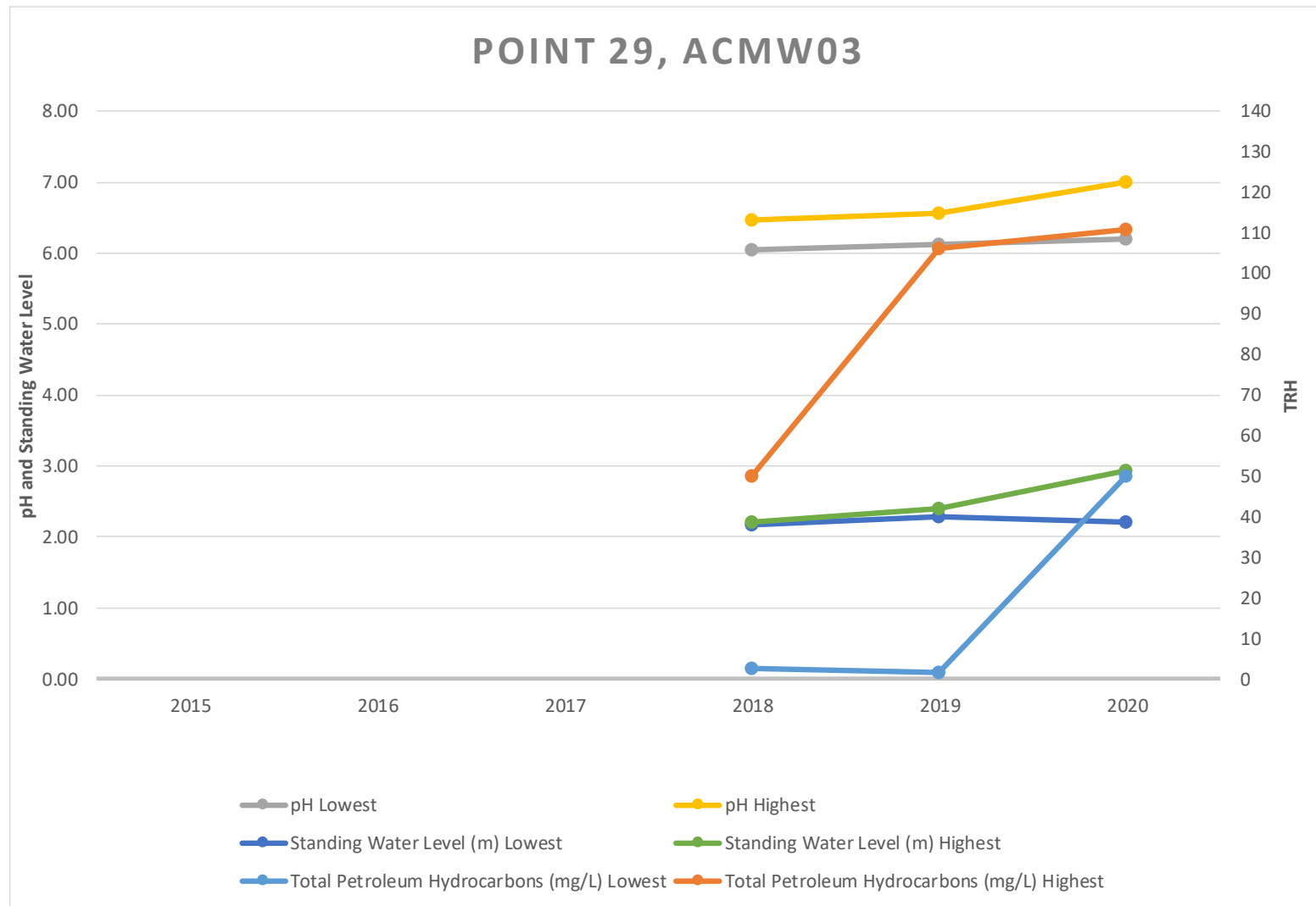


Figure 4. Monitoring Point 29 Data – 2015 to 2020

**Table 8A – Point 27: Normal Operation Conditions**

Monitoring Period	2020									Reason for Missing Data
EPA Point	Point 27, Yena Gap Effluent, Normal Operating Conditions									
Pollutant	Temperature	pH	Volumetric Flowrate	Oil and Grease	Phenols	Sulfide (un-ionised hydrogen sulfide)	Nitrogen (ammonia)	Total Suspended Solids	Biochemical Oxygen Demand	
Unit of Measure	°C	pH units	kl/day	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Licence Limit	40	6.0 - 9.0	None		2.7	None				
Monitoring Frequency Required by Licence	Continuous			6 Day						
Averaging Period	1 Hour Block	6 Minute Rolling	1 Day Block	Grab Sample						
No. Samples Collected	8760	525600	365	43	43	43	43	43	43	No Missing Data
Lowest	14.9	6.5	0	<5	<0.05	<0.1	<0.01	<1	<2	
Highest	28.9	7.3	9917	7	0.09	0.1	0.91	27	16	
Exceedance (yes/no)	No	No	N/A	No	No	No	No	No	No	

**Table 8B – Point 27: Normal Operation Conditions**

Monitoring Period	2020										Reason for Missing Data
EPA Point	Point 27, Yena Gap Effluent, Normal Operating Conditions										
Pollutant	Arsenic	Ethyl Benzene	Lead	Naphtha-lene	Nickel	Phenan-threne	Benzene	Toluene	Polycyclic Aromatic Hydrocarbons	2,4-Dimethyl-phenol	
Licence Limit		None		None		None	None	None	0.5	None	
Unit of Measure	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Monitoring Frequency Required by Licence	Monthly										
Averaging Period	24 Hour Composite Sample										
No. Samples Collected	12	12	12	12	12	12	12	12	12	12	No Missing Data
Lowest	<0.001	<0.002	<0.001	<0.0002	0.002	<0.0002	<0.001	<0.002	<0.0002	<0.0002	
Highest	0.005	<0.002	<0.001	<0.0002	0.004	<0.0005	<0.001	<0.002	<0.0002	0.0009	
Exceedance (yes/no)	No	N/A	No	N/A	No	N/A	N/A	N/A	N/A	N/A	

**Table 8C – Point 27: Wet Weather Bypass Conditions**

Monitoring Period	2020				Reason for Missing Data
EPA Point	Point 27, Yena Gap Effluent, Wet Weather Bypass Conditions				
Pollutant	Oil and Grease (Wet)	Phenols (Wet)	Total Suspended Solids (Wet)	Biochemical oxygen demand (Wet)	
Unit of Measure	mg/l	mg/l	mg/l	mg/l	
Licence Limit	70	5	100	350	
Monitoring Frequency Required by Licence	Daily during Wet Weather Bypass				
Averaging Period	Grab Sample				
No. Samples Collected	0	0	0	0	Wet Weather Bypass was not used at all during the year.
Lowest	N/A	N/A	N/A	N/A	
Highest	N/A	N/A	N/A	N/A	
Exceedance (yes/no)	No	No	No	No	

**Table 9: Asbestos Monitoring Results: 2015 – YE 2019**

Location	No. of Samples Collected 2015-19 Period	NSW SafeWork >0.02 Fibres/millilitre of air sampled	NSW Depart Health & Ampol Action Level >0.01 Fibres/millilitre of air sampled (new in 2015)
General Areas	3170 3-15 sample events per day	Nil	Nil
ACS Cell (June 2018 to 28 Nov 2019)	1863 3 locations per day	Nil	Nil

**Note:** Asbestos monitoring specific to the Demolition project was suspended post the completion of ACS clearance of pipeways and the ACS Cell was capped

**Table 10: Dust Monitoring Results**

**Table 10 (A) Dust Tracker** (Unit used during felling of structures)

Period	No. Dust Samples	No. of Exceedances	Threshold Limit
2020	NA	<i>All remaining structures felled during 2017</i>	
2019	NA		
2018	NA		
2017	91	Nil	50 µg/m <sup>3</sup>
2016	405	Nil	50 µg/m <sup>3</sup>
2015	268	Nil	50 µg/m <sup>3</sup>

**Table 10 (B) General Demolition Dust Deposition Units** (5 pre-determined locations on site)

Period	No. Dust Samples	No. Above Trigger Level	Threshold Limit
2020	Nil		
2019	44	1	4g/m2/month
2018	48	Nil	4g/m2/month
2017	60	nil	4g/m2/month

**Note:** In line with the closure of the ACS Containment Cell and completion of dust generating activities, the five-site perimeter DDU's were removed in mid-December 2019. The last 30-day monitoring period was November 2019.

**Table 10 (C) ASC Cell - Dust Deposition** (15 June 2018 to 28 Sept 2019)

Period	No. Dust Samples	No. Above Trigger Level	Threshold Limit
2020	Nil		
2019	60	4	4g/m2/month
2018	42	2	4g/m2/month
2017	?	4	4g/m2/month

**Note:** In line with the closure of the ACS Containment Cell and completion of dust generating activities, the six sentinel DPU's were removed in mid-September. The last 30-day monitoring period is September 2019.

**Table 10 (D) Concrete Crushing - Dust Tracker**

Period	No. Dust Samples	No. Above Trigger Level	Threshold Limit
Aug 2017 to 30 Aug 18	210	Nil	50 µg/m <sup>3</sup>

**Note:** Concreting crushing operations on site ceased 30 August 2018

### 2.3.1 24 Hour Kurnell Community Hotline

During the reporting period, the 24-Hour Kurnell Community Hotline received 20 calls. Table 11 shows the breakdown of these calls, based on the category of the complaint. Complaints are followed up immediately with an investigation into the potential cause of the complaint and corrective actions initiated where required. All investigations are tracking in the Ampol LPS-Database to conclusion. The outcome of the investigation and the actions taken is provided either be a face to face meeting or during a phone call to the complainant.

Figure 5 shows the breakdown of the complaints by month over the reporting period.

Compared to the previous year (2019), the number of calls regarding odour concerns has notably decreased, as well as the number of calls regarding noise concerns has decreased.

A total of 7 calls regarding perceived odour concerns were received through the Community Hotline or by the EPA. Enquiries regarding perceived odours have dropped from 40 in 2019 to 7 in 2020. This is the result of reducing the number of activities that could potential generate odours due to the completion of the demolition project and the additional odour control measure that were implemented in 2019 and continued throughout 2020.

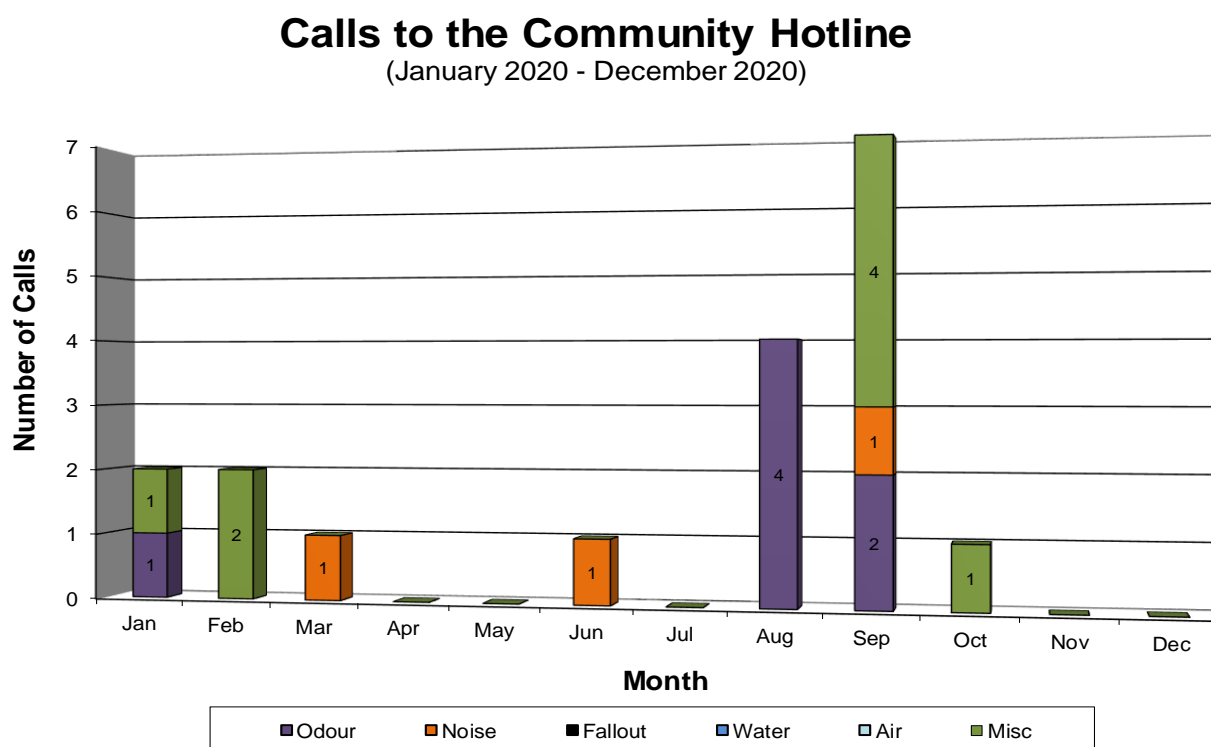
Nevertheless, all 7 enquiries were investigated and the outcome was communicated with the member of the community that called the Community Hotline.

With regards to the reduced number of noise concerns, particularly relating to shipping activities, the noise monitoring program described in Section 2.4.2 is clearly delivering benefits to the community and the business.

**Table 11 2020 Community Hotline Monitoring – Nature of Calls**

Number of Call Recorded During the Last Twelve Months	
Pollution Complaint Category	Number of Calls
Odour & Air	7
Water	0
Noise	3
Fallout & Waste	0
Miscellaneous	8
Total	18

**Note:** Miscellaneous calls related to enquiries and concerns that did not fall into the main categories above.



**Figure 5 2020 Community Hotline Monitoring – By Month**

## 2.4 TERMINAL ENVIRONMENTAL NON-COMPLIANCE AND CORRECTIVE ACTIONS

Based on the data presented in the previous section, there were no breaches of the conditions of consent specific to the demolition project or the EPL limits.

A total of seventy seven (77) tanker ships were received at the Kurnell Terminal during the 2020 period. Twelve (12) tanker ships were identified as exceeding the Kurnell Terminal EPL837 night-time noise limits during the 2020 period, three of which were associated with a community complaint. Each exceedance event was investigated and reported to the Ampol Marine Assurance and Vetting teams, in line with the agreed shipping performance process. The DPIE and NSW EPA were also notified via an agreed email proforma.

In the case of the ship named Suvretta, the NSW EPA raised concern regards the time taken to notify the regulator that the ship had exceeded the EPL837 night-time noise limits at 18:00hrs on 30 August 2020.

NSW EPA noted that Caltex generally provided timely notification but this particular notification was made 53 days after the elevated noise level was observed. NSW EPA requested that Caltex provide future notifications no later than one month after the elevated noise is observed and/or a community complaint/s is received (as per usual Caltex practice)

Summaries of the ships reported to the DPIE and NSW EPA are provided in Table 12. This represents an improvement on 2019 when sixteen (16) tanker ship exceedances against the Kurnell Terminal EPL837 night-time noise limits were identified and reported to the DPIE and NSW EPA.

In addition, two (2) community calls were received during the day on 27 Dec - in relation to vessel called "Atlantic Prince". They were concerned about an intermittent whistling sound coming from the ship – a sound that they are not familiar with. Terminal Operation Coordinators responded to both calls and advised that a product back loading operation was underway. They explained the process safety requirements on board for such activities - a pressure relief valve is fitted to tanks to relieve any pressure building in the tank being filled. The intermittent whistling sound occurs when the pressure relief valve is activated. They were advised that the back loading would be completed as promptly as possible and the whistling sound would stop. Both residents appreciated the visit by the Terminal representatives and were satisfied all was well on board the ship.

There were no other non-compliance events pertaining to Terminal operations reported in the 2020 period.

### 2.4.1 Event Reporting to Regulators:

In relations to Terminal operations, twelve (12) tanker ship exceedances against the Kurnell Terminal EPL837 night-time noise limits were reported via agreed email proforma to the DPIE and NSW EPA during the 2020 period. Summaries of the ships reported to the DPIE and NSW EPA are provided in Table 12.

Similarly, D6 of SSD5544 only require reporting to the DPIE in cases where an incident has *actual or potential significant off-site impacts* on people, or the biophysical environment associated with the development. No such reporting was required in the 2020 period.



As can be seen from Table 11 above, the main potential impact on the community in this reporting period is odour and miscellaneous enquiries.

A sustained improvement has been made on odour control during “at risk” activities and Ampol will remain vigilant and will investigate all odour related enquiries.

Regarding miscellaneous enquires, the number is similar to the previous reporting period (6 in 2019 and 8 in 2020). The nature of these enquiries is to inform Terminal Operations of the state of the fence around the terminal property following storm events or about noise, odours that are not related to the Terminal.

Following an investigation into the cause/s, all findings and actions are recorded in the Ampol Loss Prevention System, as well as communicated to the complainant.

All community complaints were investigated immediately and appropriate actions were implemented. Feedback was provided to the complainant regarding the cause of the potential impact and the actions taken to prevent it from happening again. Generally, the community has been appreciative of the way any complaints were handled.

#### **2.4.2 SoundScience ‘Smartadata’ Unattended Continuous Noise Monitoring System - Kurnell Wharf**

As mentioned in Section 2.3, noise was previously reported as the second highest potential impact on the community. In particular, members of the community complained mainly about noise generated by the tanker ships during product discharge activities at the wharf.

The SoundScience monitoring system has helped enable a sustained reduction in the number of ship exceeding the night-time noise limits (12 versus 16 in 2019) and the small number of number of community complaints (3) relating to shipping noise in 2020.

The ship noise monitoring system continues to be a critical component in the management of shipping noise and is a permanent operational tool for the Shore Officers at the Wharf. It comprises a bespoke system utilising proprietary acoustical components, customised power and communications hardware and the SoundScience SmartaData software. The system has been configured to monitor and record single channel 1/3 octave noise levels, audio and coinciding meteorological data (precipitation, wind speed and wind direction). This takes noise monitoring information gathered from the wharf, together with the meteorological information, and calculations performed using the ENM algorithm to predict noise levels at six receivers along the shoreline on Prince Charles Parade.

The results of this process are presented on the SmartaData website and made available to provide Shore Officers (SO) and other key personnel at the Terminal with real time feedback about the noise output from tanker ships berthed at the fixed berths (KUR1 and KUR2).

Using the noise limits (day and night) set by the site EPL, this system alerted Kurnell SO’s (and other operational team members) to any event of elevated noise output coming from the tanker ships during their time berthed at the Kurnell wharf and during product discharge activities. The SO was then able to instruct the Ship Captain to take all additional mitigation measures to further reduce the noise output.

To confirm, the current Ampol Marine Assurance / Ampol Ship Vetting for Chartering process now is:

1. During initial ship vetting, the ship representative is informed of the Kurnell Terminal ELP noise level limitations and of the requirement to submit a ship specific noise reduction/ control plan.
2. The noise reduction/ control plan is supplied to Kurnell Terminal Shipping Specialist by the Marine Assurance Specialist to confirm if acceptable.
3. If noise level limits are exceeded during the Kurnell ship berthing event, the ship agent/owner is asked to investigate and confirm what additional noise mitigation measures will be employed to ensure compliance should the ship be chartered for Kurnell again. The noise reduction/control plan must be resubmitted (while Ampol Vetting cannot compel ship representative to engage the services of a noise engineer, they may decide to do this).
4. Any additional noise mitigation measures are shared with Kurnell Terminal Shipping Specialist to confirm if acceptable.
5. If the ship exceeds the EPL noise level limit on the subsequent chartering event ,the ship is deemed unacceptable to return and removed from the Chartering Approval List for Kurnell. There may be occasions which this position may be reviewed in conjunction with Ampol Marine Assurance and Vetting teams and the Terminal. To initiate this review, the ship agent/owner would need to supply/provide substantial evidence that actions have been taken to correct or mitigate the ship's operational noise output.

In terms of ongoing notifications, Ampol reports non-compliant ships to both the NSW EPA and NSW DPIE. Reporting is undertaken when:

- A ship/s noise is assessed via the monitoring system to be above the EPL noise level limit, as well as when;
- Kurnell Community Hotline calls are received, relating to shipping activities

The total number of tanker ships reported to exceed the night-time noise limit is twelve (12) year to date. The details of the shipping noise exceedences and a summary of the actions taken can be found in Table 12 below.

## **2.5 TERMINAL DATA TREND ANALYSIS**

During 2020 there were twelve (12) tanker ship exceedences against the Kurnell Terminal EPL837 night-time noise limits identified and reported during the year – refer to Table 12 for details. Three (3) events involved community noise complaints. There were no other non-compliance events pertaining to Terminal operations reported in the 2020 period.

Analysis of the available data show continued sound operation of the Terminal within licence and consent requirements, other with the twelve shipping noise level exceedences. Leaving aside continued issues with shipping noise elevations events, none of the compliance and

monitoring data reveals a trend that could potentially lead to non-compliance with any other licence and/or Terminal operations specific consent conditions.

The Demolition project concluded on 31 March 2020. During the remaining period of the project in 2020, no Demolition non-compliances were identified.

## **2.6 TERMINAL DATA DISCREPANCIES**

The Terminal EMS used to manage and monitor the environmental aspects and impacts associated with the development is considered to be appropriate – as indicated by the comments made in the 2020 ISO14001:2015 Recertification audit report (LR), the EPA Annual Return and the Ampol OEMS audit for Kurnell.

The environmental stewardship processes under the Ampol EMS ensures that relevant monitoring data is generated, assessed and reported. This also allows for any potential gaps to be identified early with corrective and preventative action plans being developed and implemented.

Details of the twelve (12) tanker ship noise level exceedances against the Kurnell Terminal EPL837 night-time noise limits identified during the 2020 period and details of the corrective/preventative actions taken are summarised in Table 12 below:

**Table 12 - Summary of 2020 Non-Compliances**

Terminal Operations - Shipping Noise Exceedances against the Kurnell Terminal EPL837 Night-time Noise Limits			
Date	Description of Non-Compliance	Cause of Non-Compliance	Corrective/Preventative Action/s
January 2020	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	<p>Ship named <u>World Navigator</u> reported to have exceeded the EPL837 night-time noise limits at 01:00hrs on 30 Dec 2019</p> <p>NOTE: For accuracy, this exceedence has been included in 2020 data as reported to DPIE and EPA in January</p>	<ul style="list-style-type: none"> <li>Noted that ship had potential to exceed noise limit during sign-up. Asked to turn off non-essential equipment</li> <li>Pumping rates also reduced with small effect on noise output</li> <li>Letter of Protest issued to Captain</li> <li>Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>
March 2020	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	<p>Ship named <u>LR2 Eternity</u> reported to have exceeded the EPL837 night-time noise limits at 05:45hrs on 18 March 2020</p> <p><u>Community Hotline Complaint</u> received on 17 March at 23:00hrs</p> <p>Note: Noise output recorded at 46.7dBat time of call</p>	<ul style="list-style-type: none"> <li>Captain advised of community complaint and instructed to turn off non-essential equipment</li> <li>Pumping rates also reduced</li> <li>Letter of Protest issued to Captain</li> <li>Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>

<b>April 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	<p>Ship named <u>St Pauli</u> reported to have exceeded the EPL837 night-time noise limits at 05:00hrs on 11 April 2020</p> <p><u>Community Complaint</u> received by EPA on 13 April via email</p> <p>Note: High NNW winds and swell on 11 April required ship discharge to be suspended and disconnection of MLA's for a period of time</p>	<ul style="list-style-type: none"> <li>• Pumping rates reduced with effect</li> <li>• Captain instructed to turn off non-essential equipment</li> <li>• Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>
<b>May 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	<p>Two Ships in this period:</p> <p>Ship named <u>Grand Ace 7</u> reported to have exceeded the EPL837 night-time noise limits at 19:45hrs on 7 May 2020</p> <p>Ship named <u>Eagle Le Havre</u> reported to have exceeded the EPL837 night-time noise limits at 23:15hrs on 12 May 2020</p>	<ul style="list-style-type: none"> <li>• Pumping rates reduced with effect</li> <li>• Captain instructed to turn off non-essential equipment</li> <li>• Letter of Protest issued to each Captain</li> <li>• Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>
<b>August 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	<p>Three Ships in this period:</p> <p>Ship named <u>Stellata</u> reported to have exceeded the EPL837 night-time noise limits at 02:05hrs on 1 August 2020</p> <p>Ship named <u>LR2 Pioneer</u> reported to have exceeded the EPL837 night-time noise limits at 06:45hrs on 14 August 2020</p> <p>Ship named <u>Suvretta</u> reported to have exceeded the EPL837 night-time noise limits at 18:00hrs on 30 August 2020 (variable high winds during period berthed)</p>	<ul style="list-style-type: none"> <li>• Pumping rates reduced with Nil effect</li> <li>• Captain instructed to turn off non-essential equipment</li> <li>• Letter of Protest issued to each Captain</li> <li>• Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>

<b>September 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	Ship named <u>Pyxis Lamba</u> reported to have exceeded the EPL837 night-time noise limits at 19:30hrs on 20 September 2020  <u>Community Hotline Complaint</u> received on 21 September at 23:29hrs	<ul style="list-style-type: none"> <li>• Pumping rates reduced with Nil effect</li> <li>• Captain instructed to turn off non-essential equipment</li> <li>• Letter of Protest issued to each Captain</li> <li>• Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>
<b>October 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	Two Ships in this period:  Ship named <u>Haima</u> reported to have exceeded the EPL837 night-time noise limits at 04:00hrs on 08 October 2020  Ship named <u>STI San Antonio</u> reported to have exceeded the EPL837 night-time noise limits at 02:15hrs on 11 October 2020	<ul style="list-style-type: none"> <li>• Pumping rates reduced with Nil effect</li> <li>• Captain instructed to turn off non-essential equipment</li> <li>• Letter of Protest issued to each Captain</li> <li>• Ampol Marine Assurance / Ampol Ship Vetting notified</li> </ul>
<b>December 2020</b>	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits	Ship named <u>SKS Douro</u> reported to have exceeded the EPL837 night-time noise limits at 18:40hrs on 04 December 2020	<ul style="list-style-type: none"> <li>• Pumping rates reduced with good effect on noise output</li> <li>• Noise level reduce to below limit for remaining night-time period</li> <li>• No LOP issued as ship captain and crew able to reduce noise level to below limit for rest of time at KUR1</li> </ul>

**Notes:**

1. Ship noise EPA Licence limit exceedances events occurring in 2020 have been reported to NSW EPA and DPIE as they occurred (other than Suvretta lapse detailed above) .
2. An “Exceedance Alert” email is sent to NSW EPA and DPIE when a ship noise exceedance event is observed to have occurred.

### **PART 3 – 2020 ENVIRONMENTAL IMPROVEMENT PLAN OUTCOMES AND SUMMARY**

This section of the report provides an overview of the environmental improvement works that have been carried out during the reporting period. This includes works carried out as part of the EPL's Pollution Reduction Program, the ACS Containment Cell, development of the Terminal's Stage 2 Final OEMP (including Management Sub Plans), the WWTP future state" design and the SoundScience *Smartadata* noise monitoring system. An overview of the improvement works planned for 2021 will be provided as well.

#### **3.1 CHANGES MADE TO ENHANCE THE ENVIRONMENTAL PERFORMANCE OF DEMOLITION ACTIVITIES.**

##### **3.1.1 ACS Containment Cell**

No amendments to the following Demolition Management Plans were required during the 2020 reporting period as part of the ACS Containment Cell approval (SSD5544 MOD 2), namely:

- Air Quality Management Plan
- Noise (and Vibration) Management Plan
- Waste (and Resource) Management Plan
- Soil and Water Management Plan
- Biodiversity (and Weed) Management Plan
- Traffic Management Plan

These Management Plans remained in place for the duration of the remaining demolition activities i.e. the ACS Containment Cell. Included in these management plans are performance indicators and monitoring requirements. In addition to the above mentioned Management Plans, a number of specific processes and documents were required to ensure the environmental performance of the ACS Containment Cell. They are:

- ASC Containment Cell Long Term Environmental Management Plan (LTEMP)
- Pipeway Validation Report

The Pipeway Validation Report was submitted to the DPIE and EPA on 1 July 2020.

The LTEMP has been developed by AECOM and is currently being reviewed and finalised by the appointed Site auditor. It had been hoped that the LTEMP would be available during the 2020 period but the Site Auditor requested additional data. The ACS Containment Cell Long Term Environmental Management Plan will be incorporated into the amended Final Stage 2 Kurnell Terminal OEMP when it made available and then submitted to the DPIE for review.

**Note:** At time of this report, the final draft LTEMP is still under review by the Site Auditor. It will not be available until early 2021. As communicated to DPIE, the submission of the amended Stage 2 Final OEMP incorporating the approved LTEMP will also be delayed.

Regardless of delays with the approval of the LTEMP, the ongoing management of the ACS Containment Cell was handing over to Terminal operations in the 2<sup>nd</sup> Qtr. 2020.

All the periodic monitoring and maintenance requirements stipulated in the LTEMP have been incorporated into the Ampol Periodic Maintenance Program.

### **3.2 CHANGES MADE TO ENHANCE THE ENVIRONMENTAL PERFORMANCE OF TERMINAL ACTIVITIES IN 2020**

#### **3.2.1 Implementation of the Tank Sleeve Program - PRP U16.2**

In line with specific requirements of *Pollution Studies And Reduction Programs (PRPS)* defined in EPL837, Ampol has committed to the installation of emission reducing sleeves or seals on twelve External Floating Roof Tanks (EFRT) in Gasoline service after the transition from a Refinery to a Terminal. The NSW EPA have agreed to a three-part implementation program. Part 1 has been completed and reported on in the 2015 Annual Return. Part 2 has also been completed and reported on in the 2017 Annual Return.

Part 3 includes Tk408, Tk409, Tk318, Tk513 and Tk204 and is currently underway and will run till 2025. Progress against this requirement is reported in each Annual Return.

#### **3.2.2 Progress “Future State” of Kurnell Terminal Wastewater Treatment Plant (WWTP)**

After review of all options, the decision was made to continue to operate the existing Wastewater Treatment Plant. The plant contains primary and secondary effluent treatment resulting in a treated aqueous effluent stream that complies with the requirements of the Environment Protection Licence and can be discharged into Tasman Sea.

### **3.3 KURNELL TERMINAL OPERATIONAL ENVIRONMENTAL MANAGEMENT PLAN (OEMP) REVIEW**

In line with the requirements of Obligation D2 of SSD 5544 and B19, a Stage 1 Interim Kurnell Terminal Operational Environmental Management (OEMP) was developed and submitted to DPIE early in the project. The Plan includes all the stated elements in the sub text of D2 and D3, with a number of Management Sub Plans in common with the Demolition Project. The Interim Kurnell Terminal OEMP was approved by the DPIE in July 2017 with an expectation that the final Stage 2 OEMP would be submitted 6 weeks prior to the end of the Demolition project.

In line with the requirements, the Stage 2 Final Kurnell Terminal OEMP was finalised and submitted for review in February 2020, along with the amended Management Sub Plans and the draft ACS Containment Cell LTEMP. The DPIE provided the following feedback on the Terminal OEMP in April 2020:

- requested that Appendix 3 of the Traffic Management Sub Plan (TMSP) be amended to clearly delineate the site’s main truck, staff and visitor parking areas. These changes have been made
- that the amended OEMP include the final ACS Containment Cell LTEMP, as approved by the Site Auditor



As stated in Section 3.1.1., the LTEMP has been developed by AECOM, line with the requirements of C53 of MOD2. The Plan is currently being reviewed by the appointed Site auditor. It had been hoped that the LTEMP would be available during the 2020 period but the Site Auditor has requested additional data. The LTEMP will be incorporated into the amended Final Stage 2 Kurnell Terminal OEMP when it made available and then submitted to the DPIE for review.

**Note:** At time of this report, the final draft LTEMP is still under review by the Site Auditor. It will not be available until early 2021. As communicated to DPIE, the submission of the amended Stage 2 Final OEMP incorporating the approved LTEMP will also be delayed.

### **3.4 INDEPENDENT ENVIRONMENTAL AUDIT (IEA) OUTCOMES**

Independent environmental audits were conducted in April 2016 and September 2017, in accordance with the auditing requirements (D7) of SSD 5544 Conversion of Refinery to Finished Product Import and Distribution Terminal and SSD 5353 (F1) Ports and Berthing Upgrade. The reports, along with the Ampol responses to the non-conformances, have been submitted to the DP&E.

Discussions with the DP&E in relation to the 2016 non-conformances relating to SSD 5544 and SSD 5353 have concluded. The full 2016 IEA reports, including the Ampol responses have been published on the Ampol Public Webpage under Kurnell Conversion.

The 2017 IEA report for SSD 5544 Conversion of Refinery to Finished Product Import and Distribution Terminal SSD5544 MOD1 Demolition and SSD 5353 (F1) Ports and Berthing Upgrade was submitted to the DP&E, along with Ampol responses. The Department has informed us that the report generally satisfies the requirements of Schedule D, Condition 7 for the IEA. The full 2017 IEA reports, including the Ampol responses have been published on the Ampol Public Webpage within the *Sustainability* Section, under *Kurnell Site Conversion*.

The next IEA had been planned for September 2020 (at 3 yearly intervals). Due to COVID 19 restrictions instituted at Kurnell Terminal for non-essential Terminal operational employees and visitors such as the IEA auditor, the audit had to be deferred. These restrictions meant the few remaining Demolition project team member/s were restricted to working from home and not permitted access to the TOB to obtain the records. Representations were made to the NSW DPIE to defer the IEA to a later date.

The DPIE agreed to the deferral but required Ampol to commence the next IEA on or before **COB 1 February 2021** and submit the final report by **COB 3 May 2021**.

Refer to [Appendix 1](#) for the status of the Ampol actions arising from the above mentioned Independent Environmental Audits (IEA) - SSD 5544 and SSD 5353.

### **3.5 PLANNED 2021 IMPROVEMENT MEASURES**

#### **3.5.1 U2.1 PRP U16.2 - Implementation of the Tank Sleeve Program**

Ampol has committed to the installation of emission reducing sleeves or seals on twelve External Floating Roof Tanks (EFRT) after the transition from a Refinery to a Terminal. The NSW EPA have agreed to three-part implementation program - refer to Section 3.2.1 for details of the completed tank installations. Part 3 involves the upgrade of the remaining 5 EFRT's. A progress report will be submitted to NSW EPA by 31 December 2020.

The project is being managed by the Tank Program Team. The five remaining EFRT's in the Part 3 program are Tk408, Tk409, Tk318, Tk513 and Tk204. As stated previously, the program expected to run till 2025

#### **3.5.2 Kurnell Terminal Remediation Action Strategy**

Whilst not within the scope of SSD5544, a Kurnell Terminal Remediation Action Strategy (RAS) has been developed. Given the site history, the NSW EPA expected that a remediation action plan for the Site would be prepared for commencement following end of the demolition works.

Certain remediation projects may also require development consent to progress at the Site due to the Site's classification as an Archaeological Site under the Sutherland Shire Local Environment Plan 2015 and the stipulations of Clause 9 of State Environmental Planning Policy No. 55 – Remediation of Land.

In line with Ampol requirements, a project specific Remediation Environment Management Plan (REMP) has also been developed. The key mitigation measures and controls described in the REMP are aligned to the requirements of the Terminal OEMP's Management Sub Plans.

The RAS is comprised of a number of smaller remediation projects. The REMP requirements for an individual remediation project will be driven by the scope of works, hence not all management measures identified in the REMP will be relevant to each individual remediation project.

The RAS identifies Areas of Environmental Concern (AECs) where remediation is warranted and provides a risk-based prioritisation and timeframe for remediation.

AECs are divided into three broad categories:

- **Land contamination areas** – areas of the Site where refinery operations have resulted in soil and/or groundwater contamination
- **Asbestos impacted areas** – areas where asbestos is the primary contaminant of concern
- **Waste management areas** – areas previously used for management of refinery waste

One such area is the now closed Tank Farm area. Remediation commenced during the latter period of demolition works and is well advanced. Approved arrangements have been made to transport hydrocarbon contaminated soils to RENEX, VIC for thermal treatment. It is expected that this area will be successfully remediated by end 2021.

#### 4 SUMMARY

Over the previous year, the Terminal and remaining Demolition activities associated with the development have complied with the Development Consents for Application:

- SSD5553 (Wharf Berthing) and;
- SSD5544 (Refinery Conversion) and the subsequent Development Consent for Modifications 1, 2, 3, 4, 5 and 6 (Demolition) associated with SSD 5544.

The capping of the ASC Containment Cell was completed without incident. The ongoing monitoring program (groundwater, leachate system, leak detection and erosion/sediment) is well established with inclusion of the monitoring requirements included in Ampol's periodic maintenance program.

The environmental management systems and activities developed from the EIS, SEE and the EPL (and incorporating the consent conditions requirements), have been effective and will be continued as part of Terminal operations (land and wharf).

## APPENDIX 1.

### PART 1. STATUS OF ACTIONS ARISING FROM THE 2017 INDEPENDENT ENVIRONMENTAL AUDIT (IEA)

#### a) SSD 5544 Conversion of Refinery to Import and Distribution Terminal (including MOD 1 – Demolition Works)

Non-Compliance	Auditor Recommendation (Options)	Caltex Response	2020 Update and Commentary
<p><b>1. Odour</b></p> <p>There were potentially offensive odours emitted from the operations at the Kurnell Terminal. This was shown in the Caltex complaints records which indicate that there were 17 odour issues (in this audit period) reported by neighbours to the Kurnell facility. Caltex reported this as a non-compliance in the annual EPA return 2016 -2017.</p> <p><i>Applicable Consent Condition D2 and EPL 837 Condition L7</i></p> <p>Not caused by the direct development activities but related to Condition D2 requiring the establishment and implementation of an Operational Environmental Management.</p> <p>Note: Caltex Loss Prevention procedures were followed.</p>	<p>Continue investigations in odour complaints and design odour monitoring programs to determine severity / causes.</p> <p>Most odour investigations are post event, so consider a more pro-active approach to internally recording odours before they become potentially offensive to neighbours.</p>	<p>Caltex accepted the audit team's findings and comments.</p> <p>We will continue investigations into any odour complaints received (internal and external).</p> <p>Potential odours sources are already known. Any operation and/or maintenance works in these areas take odour mitigation measures into consideration as a proactive step in preventing offensive odours in the surrounding neighbourhood.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and demolition operations.</p>
<p><b>2. Operational Controls – loss of containment</b></p> <p>Caltex loss prevention records and the annual EPA Return 2016 – 2017 recorded a non-compliance for release of slops (wharf), a spill of 86,000L of hydrocarbon water (land), loss of gasoline from pipeline "Gasoline 1" (land)</p> <p><i>Applicable Consent Condition D2 and EPL 837 Conditions L1 and O1</i></p> <p>Not caused by the direct demolition activities but related to Condition D2 requiring the establishment and implementation of an Operational Environmental Management.</p> <p>Note: Caltex Loss Prevention procedures were followed. Reported to DPIE (Annual Review Report December 2016).</p>	<p>Loss Prevention investigations and subsequent actions were satisfactory.</p>	<p>Caltex accepted the audit team's findings and comments.</p> <p>Gasoline 1 Pipeline:</p> <ul style="list-style-type: none"> <li>• Checks were completed on all PSV valves to ensure they are operating as intended</li> <li>• All isolating valves for PSVs to be secured open</li> <li>• An internal memorandum (Loss Prevention System Alert) was issued to raise awareness of working around PSVs.</li> </ul>	<p>Corrective and preventative actions continue to be applied in Terminal and demolition operations.</p>

Non-Compliance	Auditor Recommendation (Options)	Caltex Response	2020 Update and Commentary
<p><b>3. Late Submission of Demolition Studies (prior to commencement of Demolition)</b></p> <p>The following studies were required to be submitted (for approval) to the Secretary at least one month prior to the commencement of demolition works: Firewater System Review Demolition Safety Study Demolition had started prior to submission and approval.</p> <p><i>Applicable Consent Condition C3A</i></p>	<p>Sighted subsequent approval and associated communications between Caltex and DPIE</p> <p>Noted that other Plans sampled (including sub-plans) have been submitted and approved within required timeframes. Better diligence demonstrated</p>	<p>Caltex accepted the audit team's findings and comments.</p> <p>As stated by the Auditor, better diligence has been applied to the tracking of Consent Condition requirements, DPIE submission dates and the use of the Caltex action tracking system to demonstrate compliance.</p> <p>The additional consent conditions arising from SSD5544 MOD2 and 3 are tracked in the Caltex action tracking system to demonstrate compliance.</p>	<p>Corrective and preventative actions continue to be applied in Terminal operations.</p>

**b) SSD 5353 Berthing and Ports Upgrade**

Non-compliance	Recommendation (Options)	Caltex Response	2020 Update and Commentary
<p><b>1. Odour</b></p> <p>There were potentially offensive odours emitted through the operations at the Kurnell Terminal. This was shown in the Caltex complaints records which indicate that there were 17 odour issues (in this audit period) reported by neighbours to the Kurnell facility. Caltex reported this as a non-compliance in the annual EPA return 2016 -2017.9</p> <p><i>Applicable Condition EPL 837 Condition L7</i></p> <p>Note 1: Not caused by the direct development activities, determined by Caltex to be land operations related (not wharf) but nonetheless related to EPL conditions for the whole terminal.</p> <p>Note 2: Caltex Loss Prevention procedures were followed.</p>	<p>Continue investigations into odour complaints and design odour monitoring programs to determine severity / causes. Most odour investigations are post event, so consider a more pro-active approach to internally recording odours before they become potentially offensive to neighbours.</p>	<p>Caltex accepted the audit team's findings and comments.</p> <p>We will continue investigations into any odour complaints received (internal and external).</p> <p>Potential odours sources are already known. Any operation and/or maintenance works in these areas take odour mitigation measures into consideration as a proactive step in preventing offensive odours in the surrounding neighbourhood.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and Remediation project operations.</p>

Non-compliance	Recommendation (Options)	Caltex Response	2020 Update and Commentary
<p><b>2. Operational Controls – loss of containment</b></p> <p>Caltex loss prevention records and the annual EPA Return 2016 – 2017 recorded a non-compliance for release of slops from a concrete tank (wharf related), a spill of 86,000L of hydrocarbon water (land activities), loss of gasoline from pipeline “Gasoline 1” (land activities). <i>Applicable Conditions EPL 837 Conditions L1 and O1</i></p> <p>Note 1: Not caused by the direct development activities but related to Conditions of the EPL (for the whole terminal)</p> <p>Note 2: Caltex Loss Prevention procedures were followed.</p>	<p>Loss Prevention investigations and subsequent actions were satisfactory.</p>	<p>Caltex accepted the audit team’s findings and comments.</p> <p>Caltex and its principal maintenance contractor have reviewed project planning, drilling controls, personnel controls and procedures for undertaking repairs.</p> <p>A Safety Alert was shared with all sections of Caltex and their Contracting groups that emphasised: An extra degree of responsibility and situational awareness is demanded of staff when working on infrastructure around water and when undertaking seemingly relatively routine activities. Targeted Loss Prevention Observations (LPO) will continue with these tasks.</p> <p>As a testament to the site’s commitment to spills prevention, there have been NIL reportable spills in this review period</p>	<p>Corrective and preventative actions continue to be applied in Terminal operations and other site based projects.</p>

## PART 2. STATUS OF THE CALTEX ACTIONS ARISING FROM THE 2016 INDEPENDENT ENVIRONMENTAL AUDIT (IEA)

### a) SSD 5544 Conversion of Refinery to Import and Distribution Terminal

Non-Compliance	Caltex Response (Summary)	Status	2017 IEA – Auditor Review of 2016 Actions	2020 Update and Commentary
<p><b>1, Noise Management Plan</b></p> <p>Noise monitoring, indicating a high level of Leq &gt; 60, at the boundary (Road 7) on 4<sup>th</sup> November 2014 was not further investigated / monitored to determine causes and resolution. It was not entered in the Caltex Loss Prevention System (or equivalent).</p> <p>Note: based on evidence sampled, this was an isolated example.</p> <p>Applicable Consent Conditions: C22</p>	<p>Ensure LPS (or equivalent) is used to capture high noise readings to facilitate (and have a record) of cause analysis and reporting to the</p>	<p>Communication of requirements to document all such events in LPS and Lessons Learnt session to Terminal and Demolition Project Team completed.</p> <p>Ensured effective recording and use of LPS for various issues e.g. odour, dust etc.</p>	<p>IEA Team Comments:</p> <p>Sighted communication of requirements and Lessons Learnt session.</p> <p>Sighted effective recording and use of LPS for various issues e.g. odour, dust etc.</p> <p>From environmental data sampled on this audit, no examples sighted where LPS was not used when applicable.</p>	<p>Corrective and preventative actions continue to be applied in Terminal operations and other site based projects.</p>
<p><b>2. Air Quality Management Plan</b></p> <p>Air Quality Management Plan (Jan. 2014) requires that fortnightly reports (dust, odour observations / inspections) are submitted to the Caltex EMR by relevant contractors. There were no records available.</p> <p>Applicable Consent Condition: C28</p>	<p>Ensure specified monitoring activities (in Management Plans) are complied with. Include more information in the Management Plan as what the format of such reporting will be rather than a general reference.</p> <p>CEMP and sub-plan audits can be used to verify specified activities are being complied with and records are available to demonstrate it.</p>	<p>Lessons Learnt being carried forward into the demolition works phase.</p> <p>Consistent records now exist of regular audits and inspections conducted by contractor (IDES) and the Caltex Project Audit Schedule – all plans and sub-plans audited (each plan at least bi-monthly) as specified in each plan.</p>	<p>IEA Team Comments:</p> <p>Sighted evidence of Lessons Learnt being carried forward into the demolition phase.</p> <p>Sighted records of regular audits and inspections conducted by contractor (IDS) and the Caltex Project Audit Schedule – all plans and sub-plans audited (each plan at least bi-monthly) to ensure all inspections and monitoring is conducted as specified in each plan.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>



<p><b>3. Construction Environment Management Plan (CEMP) Audits</b></p> <p>The CEMP (Jan. 2014) section 4.1 requires the following:</p> <ul style="list-style-type: none"> <li>Implementation of the CEMP will be audited by Caltex within 6 weeks of the commencement of site construction works</li> <li>Contractor will submit copies of completed monthly HSE audits</li> </ul> <p>The CEMP audit was not done; only one contractor monthly HSE audit was in evidence.</p> <p>Applicable Consent Condition: D1</p>	<p>Improve prominence of specified CEMP audits and use them as intended. Feature as a critical milestone to be tracked.</p> <p>Establish a better long-term record keeping system for information (e.g. HSE audits) from contractors.</p>	<p>Communication of requirements and Lessons Learnt session to Terminal and Demolition Project Team completed.</p> <p>DEMP audits. Project Audit Schedule covers all management plans (including sub-plans) on a regular basis. Internal audit status (Caltex and IDES) reviewed at weekly team meetings</p>	<p>IEA Team Comments:</p> <p>Sighted application of Lessons Learnt in the DEMP audits. Project Audit Schedule covers all management plans (including sub-plans) on a regular basis. Sighted audit reports and subsequent actions on findings.</p> <p>Contactor audit reports (IDES) were readily available.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>
<p><b>4. Independent Environmental Audit</b></p> <p>This IEA was conducted past the approved extension date of October 2015.</p> <p>Applicable Consent Condition: D7</p>	<p>Clarify IEA timeframes with other / future Development Consents.</p>	<p>Proactively scheduled 2017 IEA to occur before the Demolition Project wind downs in late 2017 and the Project members start to leave Caltex. – 4th Qtr. 2017</p> <p>Engaged with DPIE representatives to discuss scope of the next IEA early.</p>	<p>IEA Team Comments:</p> <p>IEAs for SSD 5544 and SSD 5353 back on track with required timeframes.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>

**SSD 5353 Berthing and Ports Upgrade** **Note: Project completed in 2015**

Non-Compliance	Caltex Response (Summary)	Status	2017 IEA – Auditor Review of 2016 Actions	2020 Update and Commentary
<p><b>1. Compliance Tracking Program</b></p> <p>Although the Compliance Tracking Program has been submitted and approved by the DG, there was no evidence available to demonstrate implementation of some elements of it.:</p> <ul style="list-style-type: none"> <li>Compliance status report within 6 weeks of the commencement. Pre-construction compliance, construction, pre-operation compliance reports were not available</li> <li>Regular compliance audit frequency was not defined (“will be based on risk” but no further information)</li> <li>No evidence of compliance audits sighted (daily inspections were seen during dredging, further inspections were sighted for piling).</li> </ul> <p>Applicable Consent Condition D7</p>	<p>Future Compliance Tracking Programs will contain clearly defined requirements for compliance audits including frequency (based on defined risk approach).</p>	<p>Application of Lessons Learnt by:</p> <p>Compliance against audit frequencies and reports for the demolition project (SSD 5544)</p> <p>Compliance audit frequencies and reports for the Kurnell Operational Management Plan (OEMP) assessed as effective during ISO 14001:2015 audits by LRQA (May 2017).</p>	<p>IEA Team Comments:</p> <p>Evidence of application of Lessons Learnt was observed in:</p> <ul style="list-style-type: none"> <li>Compliance audit frequencies and reports for the demolition project (SSD 5544) were observed as effective during the IEA of that Development Consent</li> </ul> <p>Compliance audit frequencies and reports for the Kurnell Operational Management Plan (OEMP) assessed as effective during ISO 14001:2015 audits by LRQA (May 2017).</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>
<p><b>2. Vibration Measurement and Evaluation</b></p> <p>Vibration measurement and evaluation methods specified in DIN 4150-3 were not used to determine whether the construction vibration goals would be achieved in accordance with limits in this Standard.</p> <p>Applicable Consent Condition C19</p>	<p>Caltex accepted the need to clarify the non-applicability of Consent Conditions with the Lead Regulator formally.</p> <p>It is noted that this issue resulted in an official caution letter from the Department (January 2017) as the Department considered that some form of vibrational monitoring should have been conducted.</p>	<p>To demonstrate the application of Lessons Learnt, there has been vibrational monitoring done during the demolition project (SSD 5544 Mods 1) e.g. during felling of tall structures in 2016. Vibration monitoring planned for removal of Cooling Water Line in 2017.</p>	<p>IEA Team Comments:</p> <p>Obviously, it is not possible to retrospectively take actions for vibration measurements.</p> <p>It is noted, although in a different context, there has been vibrational monitoring done during the demolition project (SSD 5544) during the felling of large structure as an example of Lessons Learnt.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>

<p><b>3. Inconsistency between Consent Condition and CEMP Plan</b></p> <p>The Sediment &amp; Water Quality Management Plan (SWQMP) contained a variation to method of monitoring Tributyltin (TBT) – the variation was clearly identified and formally approved by the DPIE. However, this variation (from real-time monitoring of TBT to grab sampling) was inconsistent with Consent Condition C3 and C35f states that a Consent Condition shall prevail over a CEMP (irrespective of whether it is approved).</p> <p>The change was relatively minor and communicated transparently and consistent with the Environment Protection License. Thus the IEA team assessed this as an administrative non-compliance – not using correct variation protocols.</p> <p>Applicable Consent Conditions C3, C35f</p>	<p>In future projects, where there is a need to seek a waiver or variation to requirements within a Development Consent, Caltex will use correct variation protocols described in the Development Consent.</p>	<p>Lessons Learnt taken forward into other projects and the demolition project (SSD 5544 Mods1);</p> <p>Early engagement of DPIE</p>	<p>IEA Team Comments:</p> <p>Retrospective issue; Lessons Learnt taken forward into other projects and the demolition project (SSD 5544 MOD 1); no recurrence of this issue observed by the IEA Team on the SSD audit.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>
<p><b>4. Submission of documents to external parties</b></p> <p>The Development Consent specifies that certain documents must be submitted to various authorities e.g. Director-General, EPA, DPI (Fisheries), SPC as applicable.</p> <p>There was no direct evidence available that some of the required documents had been submitted.</p> <p>Applicable Consent Conditions C4 – Post Dredging Water Quality Report C12 – Coastal and Hydrodynamic Processes C28 – Post Construction Road Dilapidation Report D7 – Compliance Tracking Reports</p>	<p>Future such projects will establish a central repository for registering all document submissions and any Regulatory approvals associated with the project, any communications with the authorities and other external interested parties.</p>	<p>Internal audit completed to confirm remaining submission requirements (Mods 1)</p> <p>Making better use of Caltex tools (Cintellate) to track document submissions, due dates and responsibilities, etc.</p>	<p>IEA Team Comments:</p> <p>Sighted effective application of the Lessons Learnt on the IEA of SSD 5544 demolition project. No recurrence of the issue from records sampled.</p> <p>Records kept of interactions with Regulators via Caltex tools (Cintellate)</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>

<p><b>5. Public Communications</b></p> <p>Although Caltex has shown evidence of various means of communication with interested parties and stakeholders, communication on the current implementation status of the project was not available on the public website.</p> <p>Applicable Consent Condition</p> <p>D6</p>	<p>The Kurnell Site Conversion page within the Caltex Public website was previously updated to confirm that the SSD5353 had been completed.</p> <p>An improved process has been put in place to monitor the status of the current Refinery Demolition project on a quarterly basis. The Kurnell Site Conversion page within the Caltex Public website is now updated when the status changes.</p>	<p>In addition to the comments made previously, an additional Cintellate action is in place to undertake a quarterly review of the Public website to ensure that all data is current.</p>	<p>IEA Team Comments:</p> <p>Caltex Website reviewed this audit – up-to-date. Action effective.</p> <p><b>2020 Comments:</b></p> <p>ISO14001 auditor (LR) checked the Caltex Public website to see if MOD2, 3, 4, 5 and 6 documents had been uploaded – all documents are available for general public to view.</p>	<p>Corrective and preventative actions continue to be applied in Terminal and other site based projects.</p>
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## APPENDIX 2.

### ENVIRONMENTAL PERFORMANCE AGAINST ACTIVE SSD5544 CONSENT CONDITIONS (includes Demolition Works MODS 1, 2, 3, 4 , 5 and 6)

#### 1. SSD5544 Conversion and MOD1- Demolition Works

	CONDITIONS	Applicable Phase: Conversion (C) Demolition (D) Terminal Ops (T) or General (applies to all phases) (G)	Activity Status: Completed Active/ongoing Inactive Statement	Compliance Status: Compliant Non-Compliant Not Triggered	Comments/Actions
	<b>SCHEDULE B ADMINISTRATIVE CIONDITIONS</b>				
	<b>OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT</b>				
B1	The Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the development.	G	Active/ongoing	Compliant	
	<b>TERMS OF CONSENT</b>				
B2	The Applicant shall carry out the Development generally in accordance with the:  (a) EIS; (b) RTS; (c) site layout plans and drawings in the EIS (see Appendix A); (d) MODS 1; 2; 3; 4; 5 and 6 and (e) conditions of this consent	G	Active/ongoing	Compliant	
B3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this Consent shall prevail to the extent of any inconsistency.	G	Statement	Compliant	

B4	The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:  (a) any reports, plans or correspondence that are submitted in accordance with this consent; and (b) the implementation of any actions or measures contained within these reports, plans or correspondence.	G	Active/ongoing	Compliant	
B5	Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection on request.	G	Statement	Compliant	
<b>LIMITS OF CONSENT</b>					
B6	The Applicant shall not store in excess of 925 mega litres (ML) of refined product on the Site at any one time, unless otherwise agreed to in writing by the Secretary.	G	Active/ongoing	Compliant	
B7	The construction works associated with the Development shall not extend beyond five (5) years from the date of approval.	G	Completed	Compliant	<b>2020 Update:</b>  Refer to MODs 4; 5; and 6 additional end date approvals granted by DPIE  Demolition phase of the conversion ceased on 31 March 2020.
B7A	The demolition works associated with the development shall not extend beyond three (3) years from the date of consent of MOD 1.	D	Completed	Compliant	Refer to comment against B7
<b>LAPSING OF CONSENT</b>					
B8	This consent shall lapse on 1 December 2018 unless any part of the Project is physically commenced (within the meaning of section 95 of the EP&A Act) on or before that day, in accordance with any consent or development consent, on the Land to which the consent or consent relates.	G	Completed	Compliant	Refer to comment against B7
<b>SURRENDER OF EXISTING DEVELOPMENT CONSENTS</b>					
B9	Within six (6) months of ceasing refining operations, or as otherwise agreed in writing by the Secretary, the Applicant shall surrender all existing	C	Completed	Compliant	

	development consents for the site listed in Appendix B in accordance with Clause 97 of the EP&A Regulation.				
B10	Within six (6) months of the issue of a Compliance Certificate or Occupation Certificate for the following development consents, or as otherwise agreed in writing by the Secretary, the Applicant shall surrender these consents in accordance with Clause 97 of the EP&A Regulation. (a) DA 13/0195 – Stormwater Drainage Upgrade; and (b) DA 12/0238 – Construction of a switch room.	C	Completed	Compliant	
B11	Nothing in this consent alters or modifies the following development consents: (a) SSD 5353 – Port and Berthing Works; (b) DA 13/0335 – Construction and operation of a Bio-Pile Pilot Trial to treat Hydrocarbon impacted soils; (c) DA 09/840 – Jet Fuel Remediation; and (d) DA 11/1090 – Remediation of Limestone Pits.	G	Statement	Statement	
<b>STATUTORY REQUIREMENTS</b>					
B12	The Applicant shall ensure that all licences, permits and approval/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approval/consents.	G	Active/ongoing	Compliant	<b>2020 Update:</b>  Ongoing compliance to be verified during 2021 IEA
<b>AMENDED ENVIRONMENT PROTECTION LICENCE (EPL) REQUIREMENT</b>					
B13	Prior to the commencement of construction, the Applicant must apply to the EPA to vary the Environment Protection Licence (EPL) for the Kurnell Refinery (Licence No. 837) to permit the Development.	C	Completed	Compliant	
B13 A	The Applicant shall apply to the EPA to vary the EPL if additional scheduled activities are required to be undertaken as result of the demolition works.	G	Active/Ongoing	Compliant	<b>2020 Update:</b>  SoundScience system updated in March 2020. Continues to be operational aid the Shore Officers during shipping berthing and discharge operations

	<b>STRUCTURAL ADEQUACY</b>				
B14	The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.  Notes: Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.	C	Completed	Compliant  Assessed in 2016 and 2017 IEA's	<b>2020 Update:</b>  ACS Cell completed 1st Qtr. 2020
B15	The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version.	D	Completed	Compliant  Assessed in 2017 IEA	<b>As per Dec 2019 Update:</b>  All demolition works (structures) completed mid 2919
	<b>OPERATION OF PLANT AND EQUIPMENT</b>				
B16	The Applicant shall ensure that all plant and equipment used for the Development is:  (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	G	Active/ongoing	Compliant	<b>2020 Update:</b>  Ongoing compliance to be verified during 2021 IEA
B16 A	The cooling water outlet pipeline shall be removed from beneath Silver Beach north of Prince Charles Parade and up to 20 metres seaward from the low tide mark in Botany Bay as shown in Appendix A of this consent.	D	Completed	Compliant	<b>As per Dec 2019 Update:</b>  Refer to MOD5 comments
	<b>PROTECTION OF PUBLIC INFRASTRUCTURE</b>				
B17	Prior to the commencement of construction, the Applicant shall:  (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (b) submit a copy of this report to the Secretary and Council.	C	Completed	Compliant  Assessed in 2016 and 2017 IEA's	
B17 A	Prior to the commencement of <u>demolition</u> works, the Applicant shall:  (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (b) submit a copy of this report to the Secretary and Council.	D/T	Completed	Compliant  Assessed in 2017 IEA	
B18	The Applicant shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and	G	Active/ongoing	Compliant	



	(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.				
	<b>STAGED SUBMISSION OF PLANS OR PROGRAMS</b>				
B19	<p>With the approval of the Secretary, the Applicant may:</p> <p>(a) submit any strategy, plan or program required by this consent on a progressive basis; and/or</p> <p>(b) combine any strategy, plan or program required by this consent.</p> <p>Notes:</p> <p>If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program shall clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages and the trigger for updating the strategy, plan or program.</p> <p>There must be a clear relationship between the strategy, plan or program that are to be combined."</p>	G	Active/ongoing	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	<p>Submission of Stage 2 Terminal OEMP &amp; Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020.</p> <p>Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted.</p> <p>Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p> <p>DPIE approved extension of submission date to mid-March 2021</p> <p>Requirements of current KNT OEMP have been implemented</p>
	<b>DISPUTE RESOLUTION</b>				
B20	<p>In the event that a dispute arises between the Applicant and Council or a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter must be referred by either party to the Secretary, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding to all parties. For the purpose of this condition, 'public authority' has the same meaning as provided under Section 4 of the Act.</p>	G	Statement	Not triggered	

B21	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	G	Statement	Compliant	
B22	The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.	G	Active/ongoing	Compliant	
<b>SCHEDULE C ENVIRONMENTAL PERFORMANCE AND MANAGEMENT</b>					
<b>HAZARDS AND RISKS</b>					
<b>Terms of Approval</b>					
C1	The Applicant shall: (a) carry out the Development in accordance with the PHA; (b) implement all control measures proposed in the PHA; (c) implement all actions proposed by Caltex in response to the recommendations from the Buncefield incident investigation report (Kurnell Buncefield Review - Final, submitted to the Department May 2013). (d) implement all proposed actions listed in Caltex's response to the Department's requests for additional information and clarifications (Caltex Response to D&I Queries of Caltex Submitted QRA – August 2013).	G	Completed	Compliant	
C1A	The Applicant shall implement the recommendations in section 6 of the document titled <i>Hazard and Risk Analysis</i> of the proposed <i>Caltex Kurnell Refinery Demolition Works</i> (HRA), prepared by Planager Pty Ltd and enclosed in Appendix B of the SEE.	G	Completed	Compliant	
<b>Demolition</b>					
C1B	The Applicant shall ensure that relevant demolition work associated with the development is carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version and the requirements of the <i>Work Health and safety Regulation 2011</i> .	D	Completed	Compliant	
C1C	The Applicant shall ensure that major demolition works as defined under the <i>Work Health and safety Regulation 2011</i> are undertaken by licensed demolition experts.	D	Completed	Compliant	
<b>Commissioning</b>					

C2	<p>The Applicant shall commission the development in accordance with Table 1 below:</p> <table><tr><td>System Description</td><td>Estimated Commencement of Commissioning</td><td>Estimated Commencement of Operation of System</td></tr><tr><td>Jet</td><td>1 March 2014</td><td>1 June 2014</td></tr><tr><td>Diesel</td><td>1 April 2014</td><td>1 July 2014</td></tr><tr><td>Gasoline</td><td>1 May 2014</td><td>1 August 2014</td></tr><tr><td>Slop</td><td>1 May 2014</td><td>1 August 2014</td></tr></table>	System Description	Estimated Commencement of Commissioning	Estimated Commencement of Operation of System	Jet	1 March 2014	1 June 2014	Diesel	1 April 2014	1 July 2014	Gasoline	1 May 2014	1 August 2014	Slop	1 May 2014	1 August 2014	C	Completed	Compliant	
System Description	Estimated Commencement of Commissioning	Estimated Commencement of Operation of System																		
Jet	1 March 2014	1 June 2014																		
Diesel	1 April 2014	1 July 2014																		
Gasoline	1 May 2014	1 August 2014																		
Slop	1 May 2014	1 August 2014																		
	<b>Pre-construction</b>																			
C3	<p>At least one month prior to the commencement of construction of the proposed Development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Applicant shall prepare, in consultation with WorkCover NSW, and submit for the approval of the Secretary, the studies set out under subsections (a) to (d) (the pre-construction studies) of this Condition. Construction, other than for preliminary works, shall not commence until approval has been given by the Secretary and, with respect to the Fire Safety Study, approval has also been given by Fire and Rescue NSW.</p> <p>(a) <u>Construction Safety Study</u></p> <p>A Construction Safety Study, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety'. For developments in which the construction period exceeds six (6) months, the commissioning portion of the Construction Safety Study may be submitted two months prior to the commencement of commissioning.</p> <p>(b) <u>Fire Safety Study</u></p> <p>A Fire Safety Study for the proposed Development. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated</p>	C	Completed	Compliant	Assessed in 2016 and 2017 IEA's															

<p>Water Retention and Treatment Systems'. The study shall also be submitted for approval to Fire and Rescue NSW.</p> <p>(c) <u>Hazard and Operability Study</u></p> <p>A Hazard and Operability Study for the proposed Development, chaired by an independent qualified person. The study shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'.</p> <p>The study report must be accompanied by a program for the implementation of all recommendations made in the report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.</p> <p>(d) <u>Final Hazard Analysis</u></p> <p>A Final Hazard Analysis of the proposed Development, consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis'.</p> <p>The FHA shall re-evaluate and confirm all relevant data and assumptions from the Preliminary Hazard Analysis.</p>				<p><b>As per Dec 2019 Update:</b></p> <p>Completed and submitted 4<sup>th</sup> Qtr. 2019. Subsequent approval by Regulator</p>
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	Pre-Demolition				
C3A	<p>At least one month prior to the commencement of demolition works (except for those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Applicant shall prepare and submit for the approval of the Secretary the studies set out under subsections (a) to (b). Demolition, other than of preliminary works, shall not commence until approval has been given by the Secretary.</p> <p>(a) <u>FIRE WATER SYSTEM REVIEW</u> A review of the Firewater System to detail which parts of the system will be removed and/or retained. This review shall include a list of measures that will be implemented to ensure that the firefighting capabilities of the Caltex Terminal will not be compromised during or as a result of the demolition works.</p> <p>(b) <u>DEMOLITION SAFETY STUDY</u> The study shall report on the status of implementation of the recommendation outlined in the HRA for the demolition works, enclosed as Appendix B of the SEE. The study shall include examples of the hazards control plans developed for high risk activities and task based risk assessments of the process safety related hazards.</p>	D	Completed	<p>Non-compliant – 2016 IEA</p> <p>(Administrative NC)</p> <p><b>Refer to 2016 IEA Report</b> and comments in Appendix 1, Part 2(a)</p> <p><b>Note:</b> demolition had already started prior to submission and approval, thus non-compliant with the timeframe required; all plans subsequently approved</p>	<p><b>2020 Comments:</b></p> <p>Subsequent submissions of management plans to DPIE have all been within timeframes</p>
	Pre-commissioning				
C4	<p>The Applicant shall develop, in consultation with WorkCover NSW, and implement the plans and systems set out under subsections (a) to (b) of this Condition. No later than two months prior to the commencement of commissioning of the proposed Development, or within such further period as the Secretary may agree, the Applicant shall submit, for the approval of the Secretary, documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Secretary.</p> <p>(a) <u>Emergency Plan</u> A comprehensive Emergency Plan and detailed emergency procedures for the proposed Development. This plan shall include consideration of the safety of all people outside of the Development who may be at risk from the Development. The plan shall be consistent with the Department of</p>	G	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	

	<p>Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'.</p> <p>(b) <u>Safety Management System</u></p> <p>A document setting out a comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the</p> <p>Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.</p> <p>An inspection, testing and preventive maintenance program should be developed, implemented and maintained to ensure the reliability and availability of the key safety critical equipment is, at a minimum, consistent with the data estimated in the PHA.</p>	G	Completed	Compliant  Assessed in 2016 and 2017 IEA's	
C4A	No later than one month prior to the commencement of the demolition works, or within such a further period as the Secretary may agree, the Applicant shall submit for the approval of the Secretary an updated Emergency Plan and detailed emergency procedures. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No.1 'Industry Emergency Planning Guidelines' and shall provide information of the emergency arrangements during the demolition works.	D	Completed	Compliant  Assessed in 2017 IEA	
C5	Prior to the Commencement of commissioning the first asset within each system (see Condition C2), the Applicant shall submit a Pre-Commissioning Plan and Pre-Start-up Safety Review Checklists to the Secretary.	C	Completed	Compliant  Assessed in 2016 and 2017 IEA's	

	Pre-Start-up				
C6	<p><b>Pre-Start-up Compliance Report</b></p> <p>One month prior to the commencement of operation of the first asset in each of the four systems (see Condition C2), the Applicant shall submit to the Secretary, a report detailing compliance with Conditions C3, C4 and C5 of this consent. The report shall be prepared in consultation with WorkCover NSW, and shall include:</p> <p>(a) dates of study/plan/system submission, approval, commencement of construction and commissioning;</p> <p>(b) actions taken or proposed, to implement the recommendations and safety-related control measures in the studies/plans/systems; and</p> <p>(c) responses to each requirement imposed by the Secretary under Condition C7 of this consent.</p> <p>Note: Compliance with Condition C4 may not be achievable until after such time as the documentation describing the plans and systems required under that condition have been developed. A subsequent report may therefore be required to be prepared and submitted after the documentation required by Condition C4 has been developed.</p>	T	Completed	Compliant	Assessed in 2016 and 2017 IEA's
	<b>Post-Start-up</b>				
C7	<p><b>Post-Start-up Compliance Report</b></p> <p>Three months after the refinery process units shut down, the Applicant shall submit to the Secretary, a report that has been prepared in consultation with WorkCover NSW verifying that:</p> <p>(a) the Emergency Plan required under Condition C4(a) is effectively in place and that at least one emergency exercise has been conducted; and</p> <p>(b) the Safety Management System required under Condition C4 (b) has been fully implemented and that records required by the system are being kept.</p> <p>The report shall be prepared in consultation with WorkCover NSW.</p>	T	Completed	Compliant	Assessed in 2016 and 2017 IEA's
C7A	<b>Fire Safety Study Review</b>	D	Completed	Fire Safety Study Review submitted to	

	<p>One month prior to the completion of demolition works, or within such further period as the Secretary may agree, the Applicant shall submit for the approval of the Secretary, a revised Fire Safety Study for the Caltex Terminal. This study shall cover the relevant aspects of the Department's <i>Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's Best Practice Guidelines for Contaminated Water Retention and Treatment Systems.</i></p> <p>The study shall also be submitted to NSW Fire and Rescue for approval.</p>			DPIE and NSW Fire and Rescue Oct 2019	
C8	<p><u>Hazard Audit</u></p> <p>Twelve months after all four systems being fully operational and every three years thereafter, or at such intervals as the Secretary may agree, the Applicant shall carry out a comprehensive Hazard Audit of the proposed Development and within one month of each audit submit a report to the Secretary.</p> <p>The audits shall be carried out at the Applicant's expense by a qualified person or team, independent of the Development, approved by the Secretary prior to commencement of each audit. Hazard Audits shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines' (HIPAP No. 5). The audit reports shall, in addition to the requirements provided in HIPAP No 5:</p> <p>(a) verify implementation of all actions proposed by Caltex in response to the recommendations from the Buncefield incident investigation report (Kurnell Buncefield Review - Final, submitted to the Department May 2013).</p> <p>(b) verify implementation of all actions listed in Caltex's response to the Department's requests for additional information and clarifications (Caltex Response to DP&amp;I Queries of Caltex Submitted QRA – August 2013)</p> <p>(c) confirm that the throughput and storage quantities of potentially hazardous materials are consistent with the PHA.</p> <p>(d) verify that an inspection, testing and preventative maintenance program has been developed, implemented and maintained to ensure the reliability and availability of the key safety critical equipment.</p> <p>(e) verify implementation of any measures arising from the reports submitted in respect of Conditions C2 to C5 of this consent.</p>	T	Completed	<p>Compliant</p> <p><u>1<sup>st</sup></u> Hazard Audit (October 2015)</p> <p>Audit report and proposed actions submitted to DPIE and DPIE Response (Jan. 2016).</p> <p><u>2<sup>nd</sup></u> Hazard Audit (October 2018)</p> <p>Audit report and proposed actions submitted to DPIE on 15 Oct 2018</p> <p>Actions tracked in MEET-002465</p> <p>DPIE Response Letter (15 Nov 2018)</p>	<b>2021 IEA</b> to confirm all MEET-002465 actions completed



	The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.				
C9	<b>Further Requirements</b> The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Conditions C2 to C8 of this consent inclusive, within such time as the Secretary may agree.	G	Statement	Compliant	
	<b>Fire Risk Management During Demolition</b>				
C9A	The Applicant shall: <ul style="list-style-type: none"> <li>a) ensure the emergency procedures detailed in condition 9A, address and mitigate, as far as reasonably practical, the consequences of potential fire and hazmat incidents during demolition works and the potential health risks to firefighters undertaking emergency operations in relation to foreseeable fire/hazmat scenarios;</li> <li>b) ensure two copies of the emergency procedures detailed in condition a) above are located in demolition areas;</li> <li>c) ensure appropriate first aid firefighting equipment is provided on site;</li> <li>d) ensure that plant operators and demolition contractors are trained to undertake first aid firefighting in the event of an incident; and</li> <li>e) ensure that comprehensive and specific risk control measures are developed and implemented for Scenario 5 detailed in Table 3, Section 4 of the HAZDEM. The control measures developed must incorporate comprehensive training of demolition contractors in regard to the requirements for the control of ignition sources at the site.</li> </ul>	D	Completed	Compliant  Assessed in 2016 and 2017 IEA's	The Conversion to Terminal project concluded on <u>31 March 2020</u> .

	SOIL AND WATER				
	Discharge of Water				
C10	The Development shall comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters, except as expressly provided in an EPL.	G	Active/ongoing	Compliant	Ongoing compliance to be verified during 2021 IEA
	Erosion and Sediment Control				
C11	During the construction and demolition works associated with the Development, the Applicant shall implement suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Guideline and the relevant Management and Mitigation measures contained within Appendix C of this consent.	T & D	Statement	Compliant	The Conversion to Terminal project concluded on <u>31 March 2020</u> .
	Imported Soil				
C11 A	<p>The Applicant shall:</p> <ul style="list-style-type: none"> <li>a) ensure that only VENM or any other material approved in writing by the EPA issued as fill in the Eastern ROW and Western ROW;</li> <li>b) ensure that the material used as backfill for Solver Beach is of similar grain size and colour characteristics;</li> <li>c) be permitted to use only VENM or any other material that meets all of the conditions of a Resource Recovery Order issued by the EPA under the <i>Protection of the Environment Operations (Waste) Regulation 2014</i> for use in the Caltex Terminal.</li> <li>d) ensure that any VENM or other materials used by the Applicant are fit for purpose and are only used as specified by the relevant Resource Recovery Exemption issued by the EPA.</li> <li>e) keep accurate records of the volume and type of fill to be used; and</li> <li>f) make these records available to the Department upon request.</li> </ul>	G	Active/ongoing for Terminal operations	<p>Compliant</p> <p>Assessed during 2017 IEA</p>	<p><b>ACS capping:</b></p> <p>ACS Records will be reviewed during 2021 IEA</p>

C11 B	During demolition works, the Applicant shall implement erosion and sediment control measures for managing temporary stockpiles, in accordance with the relevant requirements in the latest version of the <i>Managing Urban Stormwater: Soils and Construction – Volume 1</i> and the relevant Management and Mitigation measures contained within Appendix C of this consent.	D	Statement	Compliant	The Conversion to Terminal project concluded on <u>31 March 2020</u> .
	<b>Water Management Plan</b>				
C12	<p>The Applicant shall prepare and implement a Water Management Plan for the Development to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA;</li> <li>(b) be approved by the Secretary (refer to Conditions D1 and D2 for timing);</li> <li>(c) In addition to the standard requirements for management plans (see Condition D3), this plan must include a Surface Water Management Plan, that: <ul style="list-style-type: none"> <li>· includes a description of the water management system on site, including the: <ul style="list-style-type: none"> <li>• stormwater system; and,</li> <li>• oily water / wastewater system.</li> </ul> </li> <li>• includes plans for the above two components of the systems;</li> <li>• Demonstrates compliance with any requirements of the EPL and/or the EPA.</li> </ul> </li> </ul>	T & D	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	Compliant	<p><b>Note:</b></p> <p>Final Stage Two Kurnell OEMP has been reviewed by DPIE in March 2020 – nil amendments to Management Sub Plans needed, other than changed site map in Traffic Management</p> <p>OEMP and Management Sub Plans be reviewed during 2021 IEA</p>
C12 A	<p>The Applicant shall update and implement the Soil and Water Management Plan for demolition works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C12 and shall also:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the Secretary for approval (See condition D1A for timing);</li> <li>(b) include a description of soil and water issues associated with the demolition works;</li> <li>(c) include measures for managing soils that are excavated and stockpiled on site including erosion and sediment control measures for stockpiles and disturbed areas;</li> <li>(d) include details of water management and monitoring requirements during demolition works; and</li> </ul>	D	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	Compliant	

	(e) include procedures for corrective action in the event that potential contaminants of concern are identified in the groundwater from the quarterly groundwater monitoring program.				
	<b>Groundwater</b>				
C13	<p>In the event that groundwater is intersected during <u>construction and demolition</u> works the Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) obtain the necessary water related approvals from NOW;</li> <li>(b) develop a Groundwater Management Plan for the testing, dewatering, storage, movement and treatment of any groundwater in consultation with the NOW, to the satisfaction of the Secretary.</li> </ul>	C , D	Completed	Compliant	Nil such incidents reported
	<b>Acid Sulphate Soils (ASS) Management Plan</b>				
C14	<p>If Acid Sulfate Soils (ASS) are encountered during construction and demolition works, the Applicant shall take steps to prevent further oxidation of exposed ASS and will cease all work until an ASS Management Plan is prepared for the Development to the satisfaction of the Secretary. This Plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA and Council by a suitably qualified and experienced expert;</li> <li>(b) be approved by the Secretary prior to the continuation of any excavation works;</li> <li>(c) outline the investigations that have be undertaken to test for the presence of ASS in accordance the NSW State Government's Acid Sulphate Soils Manual (ASSMAC 1998);</li> <li>(d) detail the protocols to be put in place and followed;</li> <li>(e) detail how the ASS will be tested, handled and stockpiled;</li> <li>(f) detail measures to prevent erosion and sedimentation of ASS; and, if necessary</li> <li>(g) outline how the ASS will be disposed of off-site (e.g. at a licensed facility).</li> </ul>	C , D	Completed	Not triggered.	

	Contamination Management				
C15	<p>The Applicant shall prepare and implement a Contamination Management Plan for the Development prior to commencement of <u>construction</u>. The Plan shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA and NSW Health;</li> <li>(b) be to the satisfaction of the Secretary (refer to Condition D1 for timing);</li> <li>(c) outline measures for managing potentially contaminated soil and groundwater, including soil testing, classification, handling, storing and disposal;</li> <li>(d) detail the measures that will be employed to prevent erosion and sedimentation of contaminated soil;</li> <li>(e) detail measures for periodically testing surface water run-off that may accumulate during excavation works for elevated levels of contamination, with any water that is found to have elevated levels of contaminants being disposed of via the on-site Wastewater Treatment Plant.</li> <li>(f) detail measures for managing asbestos encountered during works, including disturbances of soil and release of asbestos into the air;</li> <li>(g) outline how contaminated soil and water would be classified and disposed of in accordance with the <i>Protection of the Environment Operations Act 1997</i> and associated regulations and characterised in accordance with the <i>EPA's Waste Classification Guidelines</i>.</li> <li>g) Detail how the storage ,disposal and transport of asbestos waste would be undertaken in with the Protection of the Environment Operations (Waste) regulations ; and</li> <li>h) assess any likely impact on existing remediation projects and, if any impacts are identified, provide details as to the measure that shall be taken to reduce or avoid that impact.</li> </ul>	C, D	<p>Plan Completed &amp; Approved</p> <p>Completed</p>	Compliant	<p><b>2020 Update:</b></p> <p>Remediation of affected areas of site included in under Kurnell Remediation Strategy. Works commenced in 2019 and will continue for a number of years.</p> <p>Covered by SSC DA process</p>
C15 A	<p>The Applicant shall update and implement the Contamination Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C15 and shall also:</p> <ul style="list-style-type: none"> <li>a) be submitted to the Secretary for approval (See condition D1A for timing);</li> <li>b) detail measures for the identification and monitoring of potentially contaminated soils and groundwater including the use of excavation visual and olfactory indicators; and</li> </ul>	D	Completed	<p>Compliant</p> <p>Assessed in 2017 IEA</p>	Refer to comments in C15

	c) include measures for managing potentially contaminated soils and groundwater during ground disturbance and excavation works.													
	<b>Asbestos Management</b>													
C15 B	<p>The Applicant shall ensure that any asbestos encountered during the demolition works is monitored, handled, transported and disposed of by appropriately qualified and licensed contractors in accordance with requirements of Workcover and relevant guidelines, including:</p> <p>a) <i>Work Health and Safety Regulation 2011;</i> b) <i>Model Code of Practice – How to Manage and Control Asbestos in the Workplace, 2011 Safe Work Australia</i> c) <i>Model Code of Practice – How to Safely Remove Asbestos, 2011 Safe Work Australia;</i> and d) <i>Protection of the Environment (Waste) Regulation 2005.</i></p>	D	Completed	Compliant	Note:  Will be reviewed during 2021 IEA									
	<b>NOISE AND VIBRATION</b>													
	<b>Construction Noise Limits</b>													
C16	<p>The Applicant shall ensure that the construction noise generated by the development does not exceed the criteria in Table 2 below.</p> <p><i>Table 2: Construction Noise Criteria (dB(A))</i></p> <table><tr><th>Location</th><th>Day LA<sub>eq</sub> (15min)</th><th>Evening LA<sub>eq</sub> (15 min)</th></tr><tr><td>R2-30D Cook Street</td><td>46</td><td>40</td></tr><tr><td>At any other residence or other noise sensitive receiver</td><td>50</td><td>45</td></tr></table>	Location	Day LA <sub>eq</sub> (15min)	Evening LA <sub>eq</sub> (15 min)	R2-30D Cook Street	46	40	At any other residence or other noise sensitive receiver	50	45	C, D	Completed	Compliant  Reviewed in 2016 and 2017 IEA	
Location	Day LA <sub>eq</sub> (15min)	Evening LA <sub>eq</sub> (15 min)												
R2-30D Cook Street	46	40												
At any other residence or other noise sensitive receiver	50	45												

	Operational Noise Limits														
C17	<p>The Applicant shall ensure that the operational noise generated by the Development does not exceed the Criteria for residential receivers are summarised in Table 3 below:</p> <p>Table 3: Operational Noise Limits dB(A)</p> <table><tr><th>Location</th><th>Day L<sub>Aeq</sub> (15min)</th><th>Evening L<sub>Aeq</sub> (15min)</th><th>Night L<sub>Aeq</sub> (15min)</th><th>Night L<sub>A</sub>max</th></tr><tr><td>At any private residential receiver</td><td>60</td><td>50</td><td>50</td><td>55</td></tr></table> <p>Notes:</p> <ul style="list-style-type: none"><li>To identify a residential receiver location, refer to Appendix F of the EIS</li><li>Noise generated by the Development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy</li><li>These criteria have been developed for this specific Development, however it is recognised that the site is zoned for heavy industrial purpose and that ultimately the amenity of the area should be controlled by the criteria contained in Table 2.1 of the Industrial Noise Policy.</li></ul>	Location	Day L <sub>Aeq</sub> (15min)	Evening L <sub>Aeq</sub> (15min)	Night L <sub>Aeq</sub> (15min)	Night L <sub>A</sub> max	At any private residential receiver	60	50	50	55	G	Active/ongoing	<p>Compliant for Terminal (Land) and Demolition</p> <p>Non-Compliant for shipping noise in 2016 IEA</p>	<p>Refer to DPIE Annual Review reports no community noise complaints have been attributed to the demolition activities or land-based Terminal operations – all were allocated otherwise by the Terminal Operations. EPA and DPIE aware of these monitoring results.</p> <p>SoundScience System remains insitu at the Wharf as a permanent operational tool</p> <p>Refer to DPIE Annual Review, Section 2.4.1 for commentary on system in 2020</p> <p>Note: Will be reviewed during 2021 IEA</p>
Location	Day L <sub>Aeq</sub> (15min)	Evening L <sub>Aeq</sub> (15min)	Night L <sub>Aeq</sub> (15min)	Night L <sub>A</sub> max											
At any private residential receiver	60	50	50	55											

**NOTE:**

In 2017, an external noise consultant (Wilkinson Murray) had been engaged to undertake attended noise measurements during demolition works and evaluate compliance with the approved noise limits. The conclusion in the report was that, in most instances, levels were controlled by extraneous noise sources and “therefore these levels do not represent noise generated by the Caltex demolition activities”.

Hours of Construction and Operation																				
C18	<p>With exception of the works identified in conditions C19 and C20, the Applicant shall comply with the hours detailed in table 4.</p> <p><i>Table 4: Construction, Demolition &amp; Operation Hours</i></p> <table><tr><th>Activity</th><th>Day</th><th>Time</th></tr><tr><td>Construction</td><td>Monday - Sunday</td><td>7.00am – 10.00pm</td></tr><tr><td>Demolition</td><td>Monday - Sunday</td><td>7.00am – 10.00pm</td></tr><tr><td>Operation</td><td>Monday - Sunday</td><td>7.00am – 10.00pm</td></tr><tr><td></td><td></td><td></td></tr></table>	Activity	Day	Time	Construction	Monday - Sunday	7.00am – 10.00pm	Demolition	Monday - Sunday	7.00am – 10.00pm	Operation	Monday - Sunday	7.00am – 10.00pm				G	Active/ongoing	Compliant.	Will be reviewed during 2021 IEA
Activity	Day	Time																		
Construction	Monday - Sunday	7.00am – 10.00pm																		
Demolition	Monday - Sunday	7.00am – 10.00pm																		
Operation	Monday - Sunday	7.00am – 10.00pm																		
C19	High noise generating construction and demolition works, including the pipeline removal works within the Eastern and Western Right of Ways, shall be confined to less sensitive times of the day, and shall not be undertaken on Sundays or public holidays or outside of the hours 7.00am and 6.00pm Monday to Saturday.	C & D	Completed	Compliant  Assessed in 2016 and 2017 IEA																
C20	<p>Construction works outside of the work hours identified in condition C18 above may be undertaken in the following circumstances:</p> <ul style="list-style-type: none"><li>(a) works that are inaudible at nearest sensitive land receivers;</li><li>(b) works that are consistent with Caltex's existing maintenance procedures and are in accordance with the existing EPL;</li><li>(c) works agreed to in writing by the EPA or the Department;</li><li>(d) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or</li><li>(e) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.</li></ul>	C & D	Completed	Compliant	Will be reviewed during 2021 IEA															



	Operating Conditions				
C21	<p>The Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) implement best management practice, including all reasonable and feasible noise management and mitigation measures to prevent and minimise operational, low frequency and traffic noise generated by the proposal;</li> <li>(b) minimise the noise impacts of the development during adverse meteorological conditions when noise criteria do not apply;</li> <li>(c) maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; and</li> <li>(d) regularly assess noise monitoring data and relocate, modify and/or stop operations to ensure compliance with the relevant conditions of this consent.</li> </ul>	T	Active/ongoing	Compliant	<p><b>As per Dec 2019 Update:</b></p> <p>Wilkinson Murray were commissioned in November 19 to undertake a noise monitoring survey to redetermine the baseline ambient noise levels following the completion of the demolition works and the capping of the ACS Cell</p>
<p><b>Commentary on Dec 2019: Environmental Noise Survey:</b></p> <p>Wilkinson Murray was engaged again to undertake residential noise monitoring undertake a noise monitoring survey to redetermine baseline ambient noise levels following the completion of the demolition works and ACS Cell capping at the Caltex Kurnell Site. Long-term unattended monitoring using environmental noise loggers was undertaken at eight locations surrounding the Caltex Kurnell site. Wilkinson Murray concluded that Caltex site activities had no discernible influence on the measured noise levels at the identified monitoring locations.</p>					

	Noise Management Plan				
C22	<p>The Applicant shall prepare and implement a Noise Management Plan for construction works and <u>site operations</u>. The plan (s) shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared and implemented by a suitably qualified and experienced person, in consultation with the EPA;</li> <li>(b) be approved by the Secretary (refer to Conditions D1 and D2 for timing);</li> <li>(c) describe the measures that will be implemented to minimise noise from the construction and operation of the development including: <ul style="list-style-type: none"> <li>· all reasonable and feasible measures being employed on site;</li> <li>· maintain equipment to ensure that it is in good order;</li> <li>· traffic noise is effectively managed; and</li> <li>· the noise impacts of the development are minimised during any meteorological conditions when the noise criteria in this consent do not apply;</li> <li>· identification of high noise generating construction activities, including proposed times when these works will be carried out (including respite periods if required) and mitigation measures to minimise adverse impacts from these activities;</li> <li>· compliance with the relevant conditions of this consent.</li> </ul> </li> <li>(d) includes a noise monitoring program that: <ul style="list-style-type: none"> <li>· shall be carried out until otherwise agreed to in writing by the Secretary;</li> <li>· is capable of evaluating the performance of the Development; and</li> <li>· includes a protocol for determining exceedances of the relevant conditions of this consent and responding to complaints.</li> </ul> </li> </ul>	C & T	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing for Terminal operations</p>	<p>Compliant for Plan but non-compliant for recording one event in 2016 IEA.</p> <p>.</p>	<p>Notes:</p> <p>Site wide approach to noise management with special measure in place for shipping noise.</p> <p>All maintenance and demolition work covered by PTW requirements.</p> <p>Both Demolition and the Terminal Noise Management Plans have been approved by DPIE</p> <p>Terminal Noise Mgmt. Plan further amended at the end of the shipping noise trial to incorporate identified process improvements. DPIE approved the plan in Feb 2019</p> <p>Revised Noise M/Plan in Stage 2 OEMP</p>
C22 A	<p>The Applicant shall update and implement the Noise Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C22 and shall also:</p> <ul style="list-style-type: none"> <li>a) be approved by the Secretary (refer to conditions D1A and D2 for timing);</li> <li>b) outline the procedures for the notification of all potentially affected persons at least one week prior to and during high noise generating works;</li> </ul>	D	<p>Plan Completed &amp; Approved</p>	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA</p>	<p>Project completed 2020</p>

	<ul style="list-style-type: none"> <li>c) implement reasonable and feasible noise and vibration management and mitigation measures during demolition activities within the Caltex Terminal;</li> <li>d) implement reasonable and feasible noise and vibration monitoring and management measures during removal of pipelines from the Eastern and Western ROW to minimise noise and vibration impacts generated by the pipeline removal works; and</li> <li>e) include strategies for monitoring vibration impacts on buildings with medium to high heritage significance proposed to be retained within the Caltex Terminal.</li> <li>f)</li> </ul>				
	<b>Construction Vibration</b>				
C23	<p>The Applicant shall aim to achieve the following construction and demolition vibration goals:</p> <ul style="list-style-type: none"> <li>(a) for structural damage, the vibration limits set out in the <i>German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures</i>; and</li> <li>(b) (b) for human exposure, the acceptable vibration values set out in the <i>Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006)</i>.</li> </ul>	C & D	Completed	Compliant	

	<b>AIR QUALITY MANAGEMENT</b>				
	<b>Dust Generation During Construction</b>				
C24	The Applicant shall carry out all reasonable and feasible measures to minimise dust generated during <u>construction works and demolition</u> works.	C & D	Completed	Compliant	
C25	During construction and demolition works, the Applicant shall ensure that: <ul style="list-style-type: none"> <li>(a) all trucks entering or leaving the site have their loads covered;</li> <li>(b) trucks associated with the Development do not track dirt onto the public road network; and</li> <li>(c) any dirt on public roads as a result of the development is promptly removed.</li> </ul>	C & D	Completed	Compliant  Assessed in 2016 and 2017 IEA	
	<b>Offensive Odour</b>				
C26	The Applicant shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the POEO Act.	G	Active/ongoing	Compliant	Refer to DPIE Annual Review reports  Will be reviewed during 2021 IEA
	<b>Operating Conditions</b>				
C27	The Applicant shall: <ul style="list-style-type: none"> <li>(a) implement all reasonable and feasible dust and odour mitigation measures to prevent and minimise odour and dust emissions from operations;</li> <li>(b) prevent and minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events;</li> <li>(c) minimise any visible off-site air pollution; and</li> <li><b>(d)</b> minimise surface disturbance of the site, other than as permitted under this consent.</li> </ul>	G	Active/ongoing	Compliant	Will be reviewed during 2021 IEA

	<b>Air Quality Management Plan</b>				
C28	<p>The Applicant shall prepare and implement an Air Quality Management Plan for the proposed <u>construction</u> works. The plan shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared and implemented by a suitably qualified and experienced expert in consultation with the EPA and NSW Health;</li> <li>(b) be approved by the Secretary (refer to Condition D1 for timing);</li> <li>(c) describe the measures that would be implemented on site to ensure: <ul style="list-style-type: none"> <li>i. the control of air quality and odour impacts of the Development;</li> <li>ii. that these controls remain effective over time;</li> <li>iii. that all reasonable and feasible air quality management practices is employed;</li> <li>iv. the air quality impacts are minimised during adverse meteorological conditions and extraordinary events; and</li> <li>v. compliance with the relevant conditions of this consent.</li> </ul> </li> <li>(d) describes the air quality &amp; odour management system;</li> <li>(e) includes an air quality monitoring program that: <ul style="list-style-type: none"> <li>i. is capable of evaluating the performance of the proposal;</li> <li>ii. includes a protocol for determining any exceedances of the relevant conditions of consent and responding to complaints;</li> <li>iii. adequately supports the air quality management system; and</li> <li>iv. evaluates and reports on the effectiveness of the air quality management system.</li> </ul> </li> </ul>	C	<p>Plan Completed &amp; Approved</p> <p>Completed</p>	<p>Compliant for Conversion works and Terminals</p> <p>Compliant</p> <p>Assessed in 2016 and 2017 IEA</p>	<p>Note:</p> <p>Will be reviewed during 2021 IEA</p>
28A	<p>The Applicant shall update and implement the Air Quality Management Plan for the <u>demolition</u> works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C28 and shall also:</p> <ul style="list-style-type: none"> <li>(a) be approved by the Secretary (refer to conditions D1a and D2 for timing);</li> <li>(b) outline procedures for VOC, odour and dust deposition monitoring and suppression methods during excavation works and where potential hydrocarbon contamination is present; and</li> <li>(c) include dust suppression measures and procedures for dust monitoring during operation of the concrete crusher.</li> </ul>	D	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	<p>Compliant</p> <p>Identified as a low risk Non-Compliance in 2016 IEA</p> <p>Demolition Air Quality Management Plan was subsequently approved by DPIE and verified by IEA Auditor in 2017.</p>	<p><b>As per 2018 update:</b></p> <p>Further amendments to the Plan were made in 2018 to account for the ACS Containment Cell. Revised and approved by DPIE. Plan posted to Caltex Public website.</p> <p>Project completed on 31 March 2020</p>

	Air Quality Verification				
C29	<p>The Applicant shall carry out an air quality verification study for the development. The study shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified expert;</li> <li>(b) be completed within 24 months of the commencement of operations or as otherwise agreed to by the Secretary;</li> <li>(c) be based on the average of emissions over a continuous 12 month period after commencement of operations, taking into account the throughput and type of fuel;</li> <li>(d) include a validation of the accuracy of the modelling predictions in the EIS;</li> <li>(e) verify that compliance with any limits or conditions in the EPL are achieved;</li> <li>(f) verify, using reasonable means, the effectiveness of any emission control measures that have been implemented to minimise air quality impacts; and</li> <li>(g) demonstrate compliance with the relevant regulatory criteria.</li> </ul>	T	Completed	Compliant	<p><b>As per 2018 Update:</b></p> <p>The 24 months trigger point has been taken as after the removal of crude oil (related to refinery activities and included in NPI calculations for air emissions) in May 2016.</p> <p>All air quality assessments have been completed and currently finalising the report, in readiness for submission to the DPIE.</p> <p><b>As per 2019 Update:</b> The Air Quality Verification Study was submitted to DPIE in Jan 2019</p> <p><b>Note:</b></p> <p>Will be reviewed during 2021 IEA</p>
	HERITAGE MANAGEMENT				
	Archival Record				
C30	<p>The Applicant shall commission an appropriately qualified heritage expert to undertake an archival photographic recording of the existing fabric and operation of the Kurnell Refinery while the plant is still operational and during the decommissioning process. The recording should include a range of media and shall be undertaken in accordance with the current Heritage Council Guidelines on Photographic Recording of Heritage Items Using Film or Digital Capture (2006).</p>	C	Completed	<p>Compliant</p> <p>Further changes to the approved Heritage Strategy – DPIE notified 26 Jul 18</p>	<p><b>Note:</b></p> <p>Document will be reviewed during 2021 I Assessed in 2016 and 2017 IEA's EA</p>

	The archival recording shall be submitted to the Heritage Council of NSW, Sutherland Shire Library and the NSW State Library within 12 months of the closure of the refinery and prior to the removal or demolition of any existing elements.			Amended report sent 27 Aug 18	
	<b>Heritage Management Strategy</b>				
C31	<p>The Applicant shall prepare and implement a Heritage Management Strategy for the Australian Oil Refinery site prior to shut-down of the refinery plant. The Strategy must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified person in consultation with Council and the Heritage Council of NSW;</li> <li>(b) be submitted to the Secretary for approval at least 2 months prior to the shut-down of the refinery plant;</li> <li>(c) review the heritage significance of the Australian Oil Refinery site; and</li> <li>(d) set out a framework to minimise or mitigate the loss of heritage value during the decommissioning process, and for the ongoing management of the Site's heritage during present and future works.</li> </ul>	C	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA</p> <p>Refer to above comments</p>	
31A	<p>The Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) continue to implement the Heritage Management Strategy prior to and during the demolition works; and</li> <li>(b) implement the recommendations stated in Chapter 4 and 5 of the document titled: <i>Caltex Kurnell Refinery Demolition: Heritage Impact Statement by Australian Museum Consulting for URS Australia Pty Ltd, October 2014.</i></li> </ul>	D	Completed	Compliant	
	<b>Other Heritage Management and Mitigation Measures</b>				
32	<p>The Applicant shall, prior to shut-down of the refinery:</p> <ul style="list-style-type: none"> <li>(a) form an in- house team to manage documentation and interpretation of the history of the refinery, including the production of a colour book;</li> <li>(b) liaise with the Mitchell Library to prepare a photographic record of the site and people associated with the refinery for inclusion in the library's archives; and</li> <li>(c) engage a professional photographer to prepare a photographic exhibition of the refinery. The location(s) and duration of the exhibition shall be to the satisfaction of Council and the NSW Heritage Council.</li> </ul>	C	Completed	<p>Compliant</p> <p>Assessed in 2016 IEA</p>	

32A	Within two months of its scheduled demolition, the Applicant shall undertake a final review of the adaptive reuse capabilities of highly significant buildings which are proposed to be demolished as per the recommendations of the Heritage Management Strategy.	D	Completed	Compliant	There were 7 buildings identified in this category (Demolition Heritage Impact Assessment pg. 105).  <b>As per 2018 Update:</b>  Refer to C30 for comments re amendments to the Strategy
32B	Within two months of its scheduled demolition, the Applicant shall complete appropriate archival records of items to be demolished as per the recommendations of the Heritage Management Strategy and other initiatives supported by the Heritage Division of the OEH.	D	Completed	Compliant	
32C	The Applicant shall implement the recommendations in section 5.2 of the document titled Caltex Kurnell Refinery Demolition: Heritage Impact Assessment, prepared by Australian Museum Consulting and enclosed in Appendix F of the SEE, for the pipeline removal works on Silver Beach to the satisfaction of Council.	D	Completed	Compliant	
<b>Potential for Discovery of Aboriginal and Non-Aboriginal Heritage Objects</b>					
C33	If during the course of construction and demolition the Applicant becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the Heritage Act 1977. Relevant works shall not recommence until written authorisation from the Heritage Council of NSW is received by the Applicant.	C & D	Completed	Compliant	Note:  Nil heritage object or aboriginal artefacts or objects identified
C34	If during the course of construction and demolition the Applicant becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with section 89A of the National Parks and Wildlife Act 1974. Relevant works shall not recommence until written authorisation from OEH is received by the Applicant.	C & D	Completed	Compliant	



Energy Efficiency And Greenhouse Gas Emission					
Managing Energy Efficiency & Greenhouse Gas Emissions					
C35	The Applicant shall implement all reasonable and feasible measures to minimise: (a) energy use; and (b) greenhouse gas emissions, throughout the life of the development, to the satisfaction of the Secretary.	G	Active/ongoing	Compliant  Assessed in 2016 and 2017 IEA	
TRANSPORT AND ACCESS					
Traffic Management Plan					
C36	The Applicant shall prepare and implement a Traffic Management Plan <u>for the Development</u> , to the satisfaction of the Secretary. The plan must: (a) be prepared and implemented by a suitably qualified and experienced person; (b) be approved by the Secretary (refer to Conditions D1 and D2 for timing); (c) detail the measures that would be implemented to ensure road safety and network efficiency during construction and operation including (but not limited to): · installation of signage and implementation of maximum speeds limits on internal roads; and · final details of the proposed traffic control measures. · details for rationalisation of the entry and exit to the site, particularly if the weigh bridge is no longer required, to improve the management of traffic and parking for members of the general public in this area (d) include a plan showing the route to be used by heavy vehicles during construction and operation; (e) detail the access and parking arrangements for the site during construction and operation; (f) include a Driver Code of Conduct that details the traffic management measures to be implemented during construction and operation to: · minimise the impacts of the development on the local and regional road network; · minimise conflicts with other road users; and · ensure truck drivers use specified routes. (g) describe the measures that will be implemented to ensure: · the nominated heavy vehicle route is used; · drivers adhere to the code of conduct; and · compliance with the relevant conditions of this consent.	G	Completed	Compliant  Assessed in 2016 and 2017 IEA	<b>As per 2018 Update:</b>  Plan reviewed to account for traffic movement between pipeways and the new ACS Containment Cell. Plan submitted to DPIE and approved along with other Plans impacted by MOD2  <b>2020 Update:</b>  Traffic Management Plan was reviewed and updated at the end of the demolition works. The revised plan was submitted as part of Stage 2. Final Terminal OEMP in Feb 2020:  Will be reviewed during 2021 IEA

	<p>(h) include a program to monitor the effectiveness of these measures; and</p> <p>(i) (i) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.</p>				
C36 A	<p>The Applicant shall update and implement the Traffic Management Plan for the <u>demolition works</u> to the satisfaction of the Secretary. This plan is to update the plan approved under condition C36 and shall also:</p> <p>(a) be prepared in consultation with Council;</p> <p>(b) be approved by the Secretary (refer to conditions D1A for timing);</p> <p>(c) include the designated routes for demolition traffic to the demolition areas within the site;</p> <p>(d) include details of traffic management arrangements for the cooling water outlet and intake pipeline removal works within the road reserves; and</p> <p>(e) outline the procedures for the notification of all potentially affected persons prior to and during the pipeline removal works within the road reserves.</p>	D	Completed	<p>Compliant</p> <p>Compliant</p> <p>Assessed in 2017 IEA</p>	Will be reviewed during 2021 IEA
C36 B	<p>The Applicant shall ensure that the pipeline removal works along the road reserves on Captain Cook Drive, Prince Charles Parade and Cook Street are undertaken in consultation with Council and do not take place during public events or public holidays in Kurnell.</p>	D	Completed	Compliant	These works were completed in 2019 with NIL incidents
<b>Car Parking</b>					
C37	<p>The Applicant shall provide sufficient parking facilities on-site for construction, demolition and operational personnel, and heavy vehicles, to ensure that construction and operational traffic associated with the Development do not utilise public and residential streets or public parking facilities for parking.</p>	G	Active/ongoing	Compliant	Refer to comments in C36

C37 A	Within 18 months after commencement of the demolition works, the Applicant shall: (a) complete a review, in consultation with Council, of the Cook Street approach to the Caltex Terminal site considering issues relating to signage, car parking arrangements, vehicle flows and the future of the weighbridge; and (b) include a timetable of implementation of the findings of this review. Note: The implementations of the findings of this review may require further approval under the EP&A Act.	D	Completed	Not triggered	Refer to comments in C36
	<b>WASTE MANAGEMENT</b>				
	<b>Waste Management On-Site</b>				
C38	The Applicant shall  (a) minimise the waste generated on site; and (b) ensure that the waste generated by the development is appropriately stored, handled and disposed of, to the satisfaction of the Secretary.	G	Active/ongoing	Compliant  Assessed in 2016 and 2017 IEA	Note:  Will be reviewed during 2021 IEA
C39	The Applicant shall ensure that any waste generated on the site during <u>construction and demolition</u> is classified in accordance with the EPA's Waste Classification Guidelines and disposed of to a facility that may lawfully accept the waste.	C & D	Completed	Compliant  Assessed in 2016 and 2017 IEA	
C39 A	The Applicant shall ensure that all hazardous materials identified in the structures to be demolished are removed prior to demolition where it is safe and practical to do so.	D	Completed	Compliant  Assessed in 2016 and 2017 IEA	
C39 B	The Applicant shall ensure that the reuse of any materials (including soil, scrap metal or building materials) on site must be fit for purpose and must not result in any adverse impacts to the environment.	D	Completed	Compliant – concreted deemed to be uncontaminated crushed and used on site in cleared areas	
C39 C	Where it is safe and practical to do so, the Applicant should as far as practicable sort all waste materials generated during demolition works to maximise opportunities for the beneficial reuse and recycling of such waste materials.	D	Completed	Compliant	<b>As per Dec 2019 Update:</b>  All waste materials generated during demolition works have been removed from site

	Waste Management Plan				
C40	<p>The Applicant shall prepare and implement a Waste Management Plan for the development to the satisfaction of the Secretary. This Plan shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA;</li> <li>(b) be approved by the Secretary (refer to timing in Conditions D1 and D2)</li> <li>(c) detail the type and quantity of waste to be generated by construction and operational phases of the development;</li> <li>(d) detail the materials to be reused or recycled, either on or off site; and</li> <li>(e) detail the procedures for handling, storage, collection of recycling and disposal of waste." </li></ul>	G	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	Compliant	<p><b>As per 2018 Update:</b></p> <p>Plan reviewed to account for ACS movement between pipeways and the new ACS Containment Cell . Plan submitted to DPIE and approved along with other Plans impacted by MOD2</p> <p><b>2020 Update:</b></p> <p>Amended Waste Mgmt Plan reviewed by DPIE when Stage 2. Final Terminal OEMP submitted in Feb 2020. Plan deals with waste generated from terminal activities. Project works follow Terminal waste management requirements</p> <p>Note:</p> <p>Will be reviewed during 2021 IEA</p>
	Demolition Waste and Resource Management Plan				
C40 A	<p>The Applicant shall prepare and implement a Demolition Waste and Resource Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C40 and shall also:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the EPA;</li> <li>(b) be approved by the Secretary (refer to condition D1a for timing);</li> <li>(c) outline the measures for the removal, storage and disposal of all waste materials generated during the demolition works; and</li> <li>(d) outline the waste reuse and recovery strategy for the demolition works.</li> </ul>	D	<p>Plan Completed &amp; Approved</p>	Compliant	<p>See above comments</p> <p>Project ended 31 March 2020</p>

	<b>Waste Received from Off-Site</b>				
C41	The Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	G	Statement	Compliant	Nil wastes receipted to site
C41 A	The Applicant shall ensure that the removal of the cooling water outlet pipeline 20 metres seaward from the low tide mark in Botany Bay is carried out in a manner that minimises the potential for disturbance and/or spread of <i>Caulerpa taxifolia</i> .	D	Completed	Compliant	<b>As per 2018 Update:</b> Outlet line successfully removed with nil observable environmental effect
	<b>BIODIVERSITY &amp; ECOLOGY</b>				
	<b>Biodiversity Management Plan</b>				
C42	The Applicant shall prepare and implement a Biodiversity Management Plan for the development to the satisfaction of the Secretary. This plan must:  (a) be prepared in consultation with the EPA; (b) be approved by the Secretary (refer to Conditions D1 and D2 for timing);; (c) include measures to be taken to minimise impacts on flora and fauna; (d) include a program with timeframes for implementation of the relevant recommendations contained in the Ecology Impact Assessment in Appendix I of the EIS, and the Management and Mitigation Measures contained in Chapter 19 of the EIS to minimise impacts on flora and fauna and maintain the biodiversity value of the site and surrounding environment.	G	Plan Completed & Approved	Compliant	<b>2020 Update:</b>  Amended Biodiversity and Weed Mgmt Plan reviewed by DPIE when Stage 2. Final Terminal OEMP submitted in Feb 2020:
	<b>Pest, Vermin &amp; Noxious Weed Management</b>				
C43	The Applicant shall:  (a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; (b) measures to be taken to prevent the spread of any identified noxious/exotic weeds off site; and (c) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds	G	Active/ongoing	Compliant	As per above comments  Will be reviewed during 2021 IEA

	<p>are not present on site in sufficient numbers to pose an environmental hazard, or cause the loss of amenity in surrounding area.</p> <p><i>Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.</i></p>				
C43 A	<p>The Applicant shall update and implement the Biodiversity and Weed Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to consolidate the plans approved under conditions C42 and C43 and shall also:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with the OEH;</li> <li>(b) be approved by the Secretary (Refer to condition D1A for timing); and NSW Government 9 Department of Planning and Environment</li> <li>(c) include details of pre-clearing inspections and frog exclusion measures to be undertaken prior to excavation along the Continental Carbon Pipeway Right of Way.</li> </ul>	G	Plan Completed & Approved	Compliant	<p><b>2020 Update:</b></p> <p>Amended Biodiversity and Weed Mgmt Plan reviewed by DPIE when Stage 2. Final Terminal OEMP submitted in Feb 2020</p> <p>Will be reviewed during 2021 IEA</p>
	<b>Continental Carbon Pipeline</b>				
C43 B	<p>Within three months after the removal of the Continental Carbon Pipeline, the Applicant shall prepare a strategy, in consultation with the OEH, for the active management of the former pipeline route including a program for weed management and removal as outlined in Management and Mitigation Measure K6 in Appendix C of this consent. The Applicant shall have commenced implementation of this strategy six months after the removal of the Continental Carbon Pipeline.</p>	D	Completed	<p>Compliant</p> <p>Removed in 2017</p> <p>Assessed in 2017 IEA</p>	

	Cooling Water Outlet Management Plan				
C43 C	<p>The Applicant shall prepare and implement a Cooling Water Outlet Management Plan for the demolition works. The plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with Council;</li> <li>(b) be approved by the Secretary (see condition D1A for timing);</li> <li>(c) include details of the timing and excavation program for pipeline removal, demolition methods, details of stockpiling, removal or reuse of excavated materials and the use of imported soils;</li> <li>(d) outline the measures to be taken to minimise potential marine ecology impacts including measures to: <ul style="list-style-type: none"> <li>• minimise sediment plumes particularly during backfilling activities;</li> <li>• minimise the potential for hydrocarbon contamination from the pipeline;</li> <li>• minimise disturbance and impact on any seagrass communities; and</li> </ul> </li> <li>• maintain machinery and equipment; and</li> <li>• exclude people and animals from the works both landward and seaward;</li> <li>(e) include details of the odour suppression measures during the pipeline removal works; and</li> <li>(f) include details of the works on Silver Beach including: <ul style="list-style-type: none"> <li>• measures to minimise impacts to the affected sand dunes on Silver Beach including dune erosion and damage to vegetation; and</li> <li>• strategies for stabilising and restoring the affected sand dunes including exclusion measures and revegetation strategies.</li> </ul> </li> </ul>	D	Completed	Compliant	<p><b>As per 2018 Update:</b></p> <p>Stage 2 Cooling Water Outlet Management Plan approved</p> <p>Cooling Water Outlet line successfully removed with nil observable environmental effect</p> <p>SSC provided favourable feedback on execution of Plan and the restoration works completed.</p> <p><b>Dec 2019 Update:</b> Foreshore regeneration completed at end of the pipeline removal and replanted vegetation is now well established</p>
	Protection of Marton Park Wetlands				
C44	<p>To ensure that the measures implemented to protect Marton Park Wetland from sedimentation, erosion and possible contaminants related to the stormwater drainage upgrade works approved by Sutherland Shire Council (DA 13/0195) are successful, monitoring of Marton park Wetland must be undertaken after completion of the stormwater upgrade works, until otherwise agreed with Council, to ensure there are no detrimental impacts on the wetland. Caltex is to prepare a monitoring plan and submit it to Council for approval prior to completion of stormwater drainage upgrade works.</p>	G	Completed	<p>Compliant</p> <p>Assessed in 2016 IEA</p>	<p><b>As per 2016 Update:</b></p> <p>Caltex has surrendered the DA (March 2016).</p>

	<b>VISUAL</b>				
	<b>Lighting</b>				
C45	The Applicant shall ensure that the lighting associated with the development:  (a) complies with the latest version of AS 4282(INT) – <i>Control of Obtrusive Effects of Outdoor Lighting</i> ; and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.	G	Statement	Compliant  Assessed in 2016 and 2017 IEA	
	<b>Signage and Fencing</b>				
C46	The Applicant shall not install any advertising on site without the written approval of the Secretary.	G	Statement	Compliant  Assessed in 2016 and 2017 IEA	
	<b>SITE SECURITY</b>				
	<b>Site Security</b>				
C47	The Applicant shall ensure that:  (a) site fencing and security gates are installed to the satisfaction of the Secretary; and (b) the security gates on site are locked whenever the site is unattended.	G	Statement	Compliant  Assessed in 2016 and 2017 IEA	



SCHEDULE D ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING					
Construction Environment Management Plan					
D1	<p>The Applicant shall prepare and implement a <u>Construction Environmental Management Plan</u> for the Development to the satisfaction of the Secretary. The Plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with Sutherland Shire Council and the EPA;</li> <li>(b) be submitted to the Secretary for approval no later than four (4) weeks prior to the commencement of construction or demolition, or within such period otherwise agreed by the Secretary;</li> <li>(c) identify the statutory Consents that apply to the Development;</li> <li>(d) consolidate all relevant management plans and monitoring programs required in the conditions of this Consent;</li> <li>(e) outline all environmental management practices and procedures to be followed during construction and demolition works associated with the Development;</li> <li>(f) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages;</li> <li>(g) incorporate all relevant management and mitigation measures contained in the EIS and RTS;</li> <li>(h) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan:</li> </ul> <ul style="list-style-type: none"> <li>(i) Human Health and Ecological Risk management - which shall be mitigated and managed in accordance with Section 6.2 of the "Human Health and Ecological Qualitative Risk Assessment" report prepared by URS, dated 28 February 2013 and the relevant Management and Mitigation Measures contained in Appendix C of this consent;</li> <li>(ii) Biodiversity and Weed management;</li> <li>(iii) Soils and Erosion management;</li> <li>(iv) Contamination management;</li> <li>(v) Noise and Vibration management;</li> <li>(vi) Air Quality management;</li> <li>(vii) Stormwater and Wastewater management;</li> <li>(viii) Traffic management;</li> </ul>	C	Plan Completed & Approved	<p>Non- Compliant against (h) in 2016 IEA</p> <p>Identified as an Administrative Non-Compliance in 2016 IEA</p> <p>Completion of corrective actions assessed in 2017 IEA</p> <p>DPIE Approved Construction EMP and Management Plans available on Ampol Public website</p>	<p><b>Note:</b></p> <p>Conversion works completed in <u>2016</u></p>

<p>(ix) Heritage management (Aboriginal and non-Aboriginal); (x) Waste and Resource management; (xi) Groundwater management; (xii) Acid Sulfate Soils management – if required; (xiii) Emergency (including spill) management; (xiv) means for assessing (and where identified) for managing interactions and cumulative impacts from the concurrent construction of other development works in the area should these coincide with the Development (e.g. the Caltex Ports and Berthing upgrade, remediation projects);</p> <p>(i) describe the roles and responsibilities for all relevant employees involved in construction and demolition works associated with the Development; (j) include arrangements for community consultation, including consultation with the NSW Department of Education and local schools at key stages of the development that may affect school operations, to identify issues and mitigate impacts throughout the course of the Development. (k) Include a complaints handling procedure during construction and demolition and operation; and, (l) include appropriate procedures to allow the regular review of the requirements of each plan to ensure that they are effective and allow for adaptive management to address contingencies that may arise over the life of the development.</p> <p>The approval of a Construction Environmental Management Plan does not relieve the Applicant of any requirement associated with this development consent. If there is an inconsistency with an approved Construction Environmental Management Plan and the conditions of this development consent, the requirements of this development consent prevail</p> <p>Construction of the development shall not commence until written consent of this plan has been received from the Secretary.</p>				
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	Demolition Environmental Management Plan				
D1A	<p>The Applicant shall prepare and implement a <u>Demolition Environmental Management Plan</u> for the demolition works to the satisfaction of the Secretary. This plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with Council, EPA and NSW Health;</li> <li>(b) be submitted to the Secretary for approval no later than four (4) weeks prior to the commencement of the demolition works, or within such period otherwise agreed by the Secretary;</li> <li>(c) identify the statutory approvals and consents that apply to the development; NSW Government 10 Department of Planning and Environment</li> <li>(d) consolidate all relevant management plans and monitoring programs required in the conditions of this Consent;</li> <li>(e) outline all environmental management practices and procedures to be followed during demolition works associated with the development;</li> <li>(f) describe all activities to be undertaken on the site during demolition works associated with the development, including a clear indication of demolition stages;</li> <li>(g) incorporate all relevant management and mitigation measures contained in the SEE;</li> <li>(h) detail how the environmental performance of the demolition works will be monitored, and what actions will be taken to address potentially adverse environmental impacts. In particular, the following environmental performance issues shall be addressed in the Plan: <ul style="list-style-type: none"> <li>i. Biodiversity and weed management(See Condition C43A);</li> <li>ii. Soils and water management (See Condition C12A);</li> <li>iii. Contamination management (See Condition C15A);</li> <li>iv. Noise and vibration management (See Condition C22A);</li> <li>v. Air quality management (See Condition C28A);</li> <li>vi. Stormwater and wastewater management (See Condition C12A);</li> <li>vii. Traffic management (See Condition C36A);</li> <li>viii. Demolition waste and resource management (See Condition C40A);</li> <li>ix. Groundwater management, including measures which are consistent with the relevant Management and Mitigation Measures contained in Appendix C of this consent;</li> <li>x. Acid sulphate soils management (See Condition C14);</li> <li>xi. Heritage management strategy (See Condition C31);</li> </ul> </li> </ul>	D	Plan Completed & Approved	<p>Compliant</p> <p>Assessed in 2017 IEA</p> <p>DPIE Approved Demolition and Management Plans available on Ampol Public website</p>	<p><b>As per 2018 Update:</b></p> <p>Plan reviewed to account for the new ACS Containment Cell.</p> <p>Plan submitted to DPIE and approved along with other Plans impacted by MOD2</p> <p><b>2020 Update:</b></p> <p>Compliance during demolition phase to be verified during 2021 IEA</p>

<p>xii. Cooling water outlet management (see Condition C42B);</p> <p>xiii. pipeline removal works on Kurnell Wharf, including details of the timing and program of works, demolition and removal techniques, and the measures to manage traffic and access to the wharf.</p> <p>xiv. means for assessing (and where identified) for managing interactions and cumulative impacts from the concurrent construction of other development works within the site should these coincide with the Development (e.g. the Caltex Ports and Berthing upgrade, remediation projects).</p> <ul style="list-style-type: none"> <li>(i) describe the roles and responsibilities for all relevant employees involved in the demolition works associated with the Development;</li> <li>(j) include details of a community notification protocol to notify potentially affected persons (including the local community and surrounding industries) of works which are likely to cause significant adverse impacts to the environment;</li> <li>(k) include a complaints handling procedure; and</li> <li>(l) include appropriate procedures to allow the regular review of the requirements of each plan to ensure that they are effective and allow for adaptive management to address issues that may arise over the life of the development.</li> </ul> <p>The approval of a <u>Demolition Environmental Management Plan</u> does not relieve the Applicant of any requirement associated with this development consent. If there is an inconsistency with an approved Demolition Environmental Management Plan and the conditions of this development consent, the requirements of this development consent prevail.</p> <p>Demolition works shall not commence until written approval of this plan has been received from the Secretary.</p>				
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	Operational Environmental Management Plan				
D2	<p>The Applicant shall prepare and implement an Operational Environmental Management Plan for the project to the satisfaction of the Secretary. This Plan must:</p> <ul style="list-style-type: none"> <li>(a) be approved by the Secretary prior to the completion of the Development;</li> <li>(b) provide the strategic framework for environmental management of the project;</li> <li>(c) identify the statutory approvals that apply to the project;</li> <li>(d) include a copy of all relevant management plans and monitoring programs relevant under this consent;</li> <li>(e) outline all environmental management practices and procedures to be followed during operation;</li> <li>(f) describe all activities to be undertaken on the site during operation;</li> <li>(g) detail how the environmental performance of the operation of the project will be monitored, and what actions will be taken to address identified adverse environmental impacts;</li> <li>(h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</li> <li>(i) describe the procedures that will be implemented to: <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the project;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the project;</li> <li>• respond to any non-compliance; and</li> <li>• respond to emergencies; and</li> </ul> </li> <li>(j) include: <ul style="list-style-type: none"> <li>• copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul> </li> </ul>	T	Plan Completed & Approved	Compliant  Stage One Interim OEMP assessed in 2016 and 2017 IEA	<p><b>2020 Update:</b> Submission of Stage 2 Terminal OEMP &amp; Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020. Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted.</p> <p>Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p> <p>DPIE approved extension of submission date to mid-March 2021</p> <p>Requirements of current KNT OEMP have been implemented</p> <p>To be assessed again in 2021 IEA</p>

	Management Plan Requirements				
D3	<p>The Applicant shall ensure that the <u>Management Plans</u> required under this consent are prepared in accordance with any relevant guidelines, and include:</p> <ul style="list-style-type: none"> <li>(a) detailed baseline data;</li> <li>(b) a description of: <ul style="list-style-type: none"> <li>· the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>· any relevant limits or performance measures/criteria; and</li> <li>· the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</li> </ul> </li> <li>(c) a description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</li> <li>(d) a program to monitor and report on the: <ul style="list-style-type: none"> <li>· impacts and environmental performance of the development; and</li> <li>· effectiveness of any management measures (see (c) above);</li> </ul> </li> <li>(e) a contingency plan to manage any unpredicted impacts and their consequences;</li> <li>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</li> <li>(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> <li>· incidents;</li> <li>· complaints;</li> <li>· non-compliances with statutory requirements; and</li> <li>· exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul> </li> <li>(h) a protocol for periodic review of the plan.</li> </ul> <p><i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i></p>	G	Completed  Active/ongoing	Compliant	<p><b>2020 Update:</b></p> <p>All Management Plan applicable to Terminal operations revised at the end of Demolition works. Submitted as appendices in Final Stage Two Terminal OEMP.</p> <p>Draft ACS C/Cell LTEMP submitted with Terminal OEMP</p> <p>See comments in D2 re DPIE extension</p> <p>To be assessed again in 2021 IEA</p>

	Annual Review				
D4	<p>By 31 December 2014, or as otherwise agreed in writing by the Secretary, the Applicant shall review the environmental performance of the Development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against:</p> <ul style="list-style-type: none"> <li>· the relevant statutory requirements, limits or performance measures/criteria;</li> <li>· the monitoring results of previous years; and</li> <li>· the relevant predictions in the EIS;</li> </ul> <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the Development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the Development, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measures will be implemented over the current calendar year to improve the environmental performance of the Development.</p>	G	<p>Now completed for years :</p> <ul style="list-style-type: none"> <li>• 2014,</li> <li>• 2015,</li> <li>• 2016,</li> <li>• 2018</li> <li>• 2019 and;</li> <li>• 2020</li> </ul> <p>Active/ongoing</p>	Compliant	<p><b>Dec 2020 Note:</b></p> <p>This is the 2020 Annual Review report</p> <p>To be assessed again in 2021 IEA</p>

	Revision of Strategies, Plans & Programs				
D5	<p>Within 3 months of the submission of an:</p> <ul style="list-style-type: none"> <li>(a) annual review under Condition D4 of this schedule;</li> <li>(b) incident report under Condition D6 of this schedule;</li> <li>(c) audit report under Condition D8 of this schedule; and</li> <li>(d) any modifications to this consent,</li> </ul> <p>the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i></p>	G	Active/ongoing	Compliant	Refer to comments made in D2
	<b>REPORTING</b>				
	<b>Incident Reporting</b>				
D6	<p>The Applicant shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the development as soon as practicable after the Applicant becomes aware of the incident. Within 7 days of the date of this incident, the Applicant shall provide the Secretary and any relevant agencies with a detailed report on the incident.</p>	G	Active/ongoing	Compliant	<p><b>Dec 2020 Update:</b></p> <p>The DPIE and EPA receive email notifications of any ship that exceeds the EPL night-time noise limit</p> <p>To be assessed again in 2021 IEA</p>
	<b>INDEPENDENT ENVIRONMENTAL AUDIT</b>				
D7	<p>Within a year of the date of this consent, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <ul style="list-style-type: none"> <li>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</li> <li>(b) include consultation with the relevant agencies;</li> <li>(c) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent</li> </ul>	G	Active/ongoing	Compliant	<p><b>Dec 2020 Update:</b></p> <p>2020 IEA deferred due to Covid 19 restrictions.</p> <p>DPIE approved extension - next IEA end Jan 2021</p>



	<p>and any relevant EPL and/or Water License (including any assessment, plan or program required under these approvals);</p> <p>(d) review the adequacy of any approved strategy, plan or program required under these approvals; and</p> <p>(e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.</p> <p><i>Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</i></p>			Administrative Non-Compliance in 2016  (2016 IEA started late)	
D8	<p>Within 3 months of commissioning this audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.</p>	G	Active/ongoing	Compliant	Submitted for each IEA event
<b>ACCESS TO INFORMATION</b>					
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>· the EIS; SEE SSD5544 and MOD's 1, 2, 3, 4, 5 and 6;</li> <li>· current statutory approvals for the Development;</li> <li>· approved strategies, plans or programs;</li> <li>· a summary of the monitoring results of the Development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>· a complaints register, updated on a quarterly basis;</li> <li>· copies of any annual reviews (over the last 5 years);</li> <li>· any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>· any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up-to-date,</p> <p><i>Note: This requirement does not require any confidential information to be made available to the public</i></p>	G	Active/ongoing	Compliant	Consent documents and DPIE Approved Construction/Demolition and Terminal EMP's and all Management Plans available on Ampol Public website

### SSD 5544 MOD2 2018 - Asbestos Contaminated Soils (ACS) Management Works

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	Conditions	Applicable Phase: Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	Activity Status: Completed Active/ongoing Inactive	Compliance Status Compliant Not Compliant Not Triggered	Comments/Actions
	LIMITS OF CONSENT				
B7B	Notwithstanding Condition B7A, the <a href="#">ACS Management Works</a> shall not extend beyond 30 April 2019	D	Active/ongoing	Compliant	<b>Dec 2019 Update:</b> Refer to MOD 4 and 5 regards changed to project end date (31 March 2020)
	ACS MANAGEMENT WORKS				
	Site Auditor				
C48	Prior to commencement of the <a href="#">ACS management works</a> , the Applicant shall provide evidence that an <a href="#">EPA accredited Site Auditor</a> has been appointed to review and approve the RAP and long-term environmental management plan (LTEMP) (see Conditions C54 and C55, respectively).	D	Completed	Compliant	
	Remedial Action Plan				
C49	<p>Prior to commencement of the <a href="#">ACS management works</a>, the Applicant shall ensure the <a href="#">RAP</a> is reviewed and approved by the Site Auditor. The Site Auditor shall be satisfied the design and construction methods outlined in the CQAP will achieve a level of containment which meets the remedial objectives described in the RAP.</p> <p>A copy of the Site Audit Report, Site Audit Statement shall be provided to the EPA and Secretary, which demonstrates the appropriateness of the RAP.</p> <p><b>Note: The Site Auditor should consider the Construction Quality Assurance Procedures in relation to the Environmental Guidelines: Solid Waste Landfills (EPA, 2<sup>nd</sup> Edition, 2016)</b></p>	D	Completed	Compliant	

	Containment Cell				
C50	<p>Prior to commencement of the ACS management works, the Applicant shall prepare a <a href="#">Containment Cell Management Plan (CCMP)</a> for the ACS management works. The plan shall be prepared in accordance with Condition D3 and shall:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a suitably qualified and experienced person(s), in consultation with the EPA;</li> <li>(b) be approved by the Secretary;</li> <li>(c) describe details of the cell construction and filling activities including soil acceptance criteria for the containment cell;</li> <li>(d) describe the measures that will be implemented to ensure the control of soil, surface water, groundwater, air quality and noise impacts associated with the ACS management works;</li> <li>(e) include a register to detail the type and volume of material excavated and disposed of as part of the ACS management works; and</li> <li>(f) include details of dust, asbestos, waste and groundwater monitoring requirements.</li> </ul>	D	Completed	<p>Compliant</p> <p>DPIE approved CCMP available on Ampol Public website</p>	<p><b>2020 update:</b></p> <p>Action will be reviewed during 2021 IEA</p>
C51	The Applicant shall only place <a href="#">ACS sourced from within the site</a> in the containment cell.	D	Completed	Compliant	
C52	<p>Upon completion of the construction aspects associated with the <a href="#">ACS management works</a> (which includes closure of the containment cell), the Applicant shall prepare a <a href="#">Containment Cell Final Report</a>. The report shall:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the EPA;</li> <li>(b) confirm the containment cell has been constructed in accordance with the CQAP; and</li> <li>(c) include a summary of the waste classification data (including characterisation and tracking) and monitoring data required under Condition C50 (e) and (f).</li> </ul>	D	Completed	Compliant	<p><b>2020 update:</b></p> <p>Report submitted to DPIE</p> <p>Action will be reviewed during 2021 IEA</p>
	Long Term Environmental Management Plan				
C53	<p>Prior to the completion of the construction aspects associated with <a href="#">the ACS management works</a>, the Applicant in consultation with the EPA, shall prepare a <a href="#">LTEMP</a> for the containment cell, to the satisfaction of the Site Auditor. A copy of the Site Audit Report and Site Audit Statement shall be provided to the EPA and Secretary, which demonstrates the appropriateness of the LTEMP</p>	D	Active/Ongoing	Compliant	<p><b>2020 update:</b></p> <p>Draft LTEMP submitted to DPIE in Feb 2020. Final Site auditor approved plan will not be available until March 2021. DPIE approved extension to mid-March 2021</p>

C54	<p>Upon completion of the construction aspects associated with the <a href="#">ACS management works</a> (which includes closure of the containment cell) closure of the containment cell, the Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) implement the approved LTEMP and manage the containment cell in accordance with the approved LTEMP; and</li> <li>(b) ensure the containment cell is listed on the relevant planning certificate for the land, issued under Section 149(5) of the EP&amp;A Act, for the site.</li> </ul>	D/T	Active/Ongoing	<p>Re (a) - GW well gauging and leachate management system insitu at C/Cell included in M7 PM program</p> <p>Re (b) amendments to Planning Certificate (SSC) delayed until final LTEMP is available in early 2021</p>	<p>Refer to comments in C53</p> <p>Will be reviewed during 2021 IEA</p>
<b>Pipeway Validation</b>					
C55	<p>Upon completion of the construction aspects associated with the <a href="#">ACS management works</a>, the Applicant shall prepare a Validation Report of the pipeways. The report shall:</p> <ul style="list-style-type: none"> <li>(a) be submitted to the EPA and the Secretary for review;</li> <li>(b) be prepared in accordance with the RAP and the <i>Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites</i> (OEH 2011);</li> <li>(c) include details of the following: <ul style="list-style-type: none"> <li>(i) sampling and analysis plan and sampling methodology; and</li> <li>(ii) results of any validation sampling compared to relevant guidelines/criteria.</li> </ul> </li> </ul>	D	Completed in 2020	Validation Report submitted to DPIE and NSW EPA - 8 Oct 2020	<p>Note:</p> <p>To be reviewed during 2021 IEA</p>

	Operational Environmental Management Plan				
D2	<p>The Applicant shall prepare and implement an <b>Operational Environmental Management Plan</b> for the project to the satisfaction of the <b>Secretary</b>. This Plan must:</p> <ul style="list-style-type: none"> <li>(a) be approved by the Secretary prior to the commencement of operations;</li> <li>(b) provide the strategic framework for environmental management of the Development;</li> <li>(c) identify the statutory approvals that apply to the Development;</li> <li>(d) include a copy of all relevant management plans and monitoring programs relevant under this consent, including: <ul style="list-style-type: none"> <li>(i) Water Management Plan (See Condition C12);</li> <li>(ii) Noise Management Plan (See Condition C22);</li> <li>(iii) Traffic Management Plan (See Condition C36);</li> <li>(iv) Waste Management Plan (See Condition C40);</li> <li>(v) Biodiversity Management Plan (See Condition 42); and,</li> <li>(vi) Pest, Vermin &amp; Noxious Weed Management (See Condition C43).</li> </ul> </li> <li>(e) outline all environmental management practices and procedures to be followed during operation;</li> <li>(f) describe all activities to be undertaken on the site during operation;</li> <li>(g) detail how the environmental performance of the operation of the project will be monitored, and what actions will be taken to address identified adverse environmental impacts;</li> <li>(h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project;</li> <li>(i) describe the procedures that will be implemented to: <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the project;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise during the course of the project;</li> <li>• respond to any non-compliance; and</li> <li>• respond to emergencies; and</li> </ul> </li> <li>(j) include: <ul style="list-style-type: none"> <li>• copies of any strategies, plans and programs approved under the conditions of this consent; and</li> <li>• a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.</li> </ul> </li> </ul>	D/T	<p>Active/Ongoing - points (a) to (j) inclusive</p> <p>Inactive for (k) – refer to comments</p>	<p>Compliant – points (a) to (j) inclusive</p> <p>Not Triggered for (k)</p>	<p>Kurnell Terminal Stage 1 Interim OEMP does not currently reference the ACS Containment Cell</p> <p><b>2020 Update:</b> Submission of Stage 2 Terminal OEMP &amp; Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020.</p> <p>Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted.</p> <p>Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p> <p>DPIE approved extension of submission date to mid-March 2021</p> <p>Requirements of current KNT OEMP have been implemented</p>

	(k) a copy of the Long-Term Environmental Management Plan (see Condition 53) for the ACS management works.				
<b>Revision of Strategies, Plans &amp; Program</b>					
D5	<p>Within three months of:</p> <ul style="list-style-type: none"> <li>(a) an approval of a modification;</li> <li>(b) a submission of an incident report under Condition D6;</li> <li>(c) an approval of an Annual Review under Condition D4; or</li> <li>(d) a completion of an audit under Condition D7.</li> </ul> <p>the Applicant must review, and if necessary, revise the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.</p> <p><i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development</i></p>	D/T	Active/Ongoing	Not Triggered in 2020	

	Access to Information				
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(a) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>the EIS;</li> <li>SEE Approvals and MOD's 1, 2,</li> <li><a href="#">and accompanying documents</a>;</li> <li>current statutory approvals for the Development;</li> <li>approved strategies plans or programs;</li> <li>a summary of the monitoring results of the Development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>a complaints register, updated on a quarterly basis;</li> <li>copies of any annual reviews (over the last 5 years);</li> <li>any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>any other matter required by the Secretary; and</li> </ul> <p>(b) keep this information up-to-date,</p> <p><i>Note: This requirement does not require any confidential information to be made available to the public.</i></p>	G	Active/Ongoing	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA</p>	<p><b>2020 comments:</b></p> <p>Recurrent actions assigned in Cintellate to review the Ampol Public Website every 3 months for currency and accuracy of content</p> <p>Note:</p> <p>Currency be reviewed during 2021 IEA</p>

**SSD 5544 MOD3 2018 – Tank 101 Demolition Works**

SCHEDULE B – ADMINISTRATIVE CONDITIONS					
	Conditions	Applicable Phase: Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	Activity Status: Completed Active/ongoing Inactive	Compliance Status Compliant Not Compliant Not Triggered	Comments/Actions
Pre-Commissioning					
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(c) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>the EIS;</li> <li>SEE Approvals and MOD's 1, 2, 3,</li> <li><a href="#">and accompanying documents</a>;</li> <li>current statutory approvals for the Development;</li> <li>approved strategies plans or programs;</li> <li>a summary of the monitoring results of the Development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>a complaints register, updated on a quarterly basis;</li> <li>copies of any annual reviews (over the last 5 years);</li> <li>any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>any other matter required by the Secretary; and</li> </ul> <p>(d) keep this information up-to-date,</p> <p>Note: This requirement does not require any confidential information to be made available to the public.</p>	G	<p>Completed</p> <p>Tank 101 demolished in 2018</p>	Compliant	<p><b>2020 comments:</b></p> <p>Recurrent actions assigned in Cintellate to review the Caltex Public Website every 3 months for currency and accuracy of content</p>
C4A	<p>Prior to commencement of the Tank 101 demolition works described in MOD 3, the Applicant shall update and implement the Emergency Plan required under Condition C4(a) to incorporate the <a href="#">Tank 101 demolition works</a>. The plan shall include information of the emergency arrangements</p>	D	Completed	Compliant Demolition of structures e.g. tanks already covered in ERP and scenarios	



	during the tank demolition works and a copy of the plan shall be submitted to the Secretary.				
	<b>Hours of Construction and Operation</b>				
C19	High noise generation construction and demolition works including the pipeline removal works within the Eastern and Western Right of Ways, and the <a href="#">Tank 101 demolition works described in MOD 3</a> , shall be confined to less sensitive times of the day, and shall not be undertaken on Sundays or public holidays or outside of the hours 7:00am and 6:00pm Monday to Saturday	D	Completed	Compliant	

### SSD 5544 MOD 4 2018 - Extension of Demolition Works Period

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	<b>Conditions</b>	<b>Applicable Phase:</b> Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	<b>Activity Status:</b> Completed Active/ongoing Inactive	<b>Compliance Status</b> Compliant Not Compliant Not Triggered	<b>Comments/Actions</b>
	<b>Pre-Commissioning</b>				
B2	The Applicant shall carry out the Development generally in accordance with the:  (a) EIS; (b) RTS; (c) site layout plans and drawings in the EIS (see Appendix A); (d) MOD 1; (e) MOD 2 (f) MOD 3 (g) MOD 4	G	Statement	Compliant	<b>Refer to notes under MOD 5</b>
B7A	The <a href="#">Demolition works</a> associated with the development <a href="#">must not extend beyond 10 June 2019</a>	D	Completed	Compliant	

ANNUAL REVIEW 2020  
ENVIRONMENTAL PERFORMANCE

D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(e) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the EIS;</li> <li>• SEE and MOD 1;</li> <li>• MOD 2 and its accompanying documents;</li> <li>• MOD 3 and its accompanying documents</li> <li>• MOD 4 and its accompanying documents</li> <li>• current statutory approvals for the Development;</li> <li>• approved strategies plans or programs;</li> <li>• a summary of the monitoring results of the Development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>• a complaints register, updated on a quarterly basis;</li> <li>• copies of any annual reviews (over the last 5 years);</li> <li>• any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>• any other matter required by the Secretary; and</li> </ul> <p>(f) keep this information up-to-date,</p> <p>Note: This requirement does not require any confidential info to be made available to the public</p>	G	Active/Ongoing	Compliant	<p>Recurrent actions assigned in Cintellate to review the Caltex Public Website every 3 months for currency and accuracy of content</p> <p>Will be reviewed during 2021 IEA</p>
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**SSD 5544 MOD5 July 2019**

**Asbestos contaminated soils containment cell capacity increase and end date extension, cooling water outlet pipeline amendments**

	<b>SCHEDULE B – ADMINISTRATIVE CONDITIONS</b>				
	<b>Conditions</b>	<b>Applicable Phase:</b> Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	<b>Activity Status:</b> Completed Active/ongoing Inactive	<b>Compliance Status</b> Compliant Not Compliant Not Triggered	<b>Comments/Actions</b>
	<b>Pre-Commissioning</b>				
B2	<p>The Applicant shall carry out the Development generally in accordance with the:</p> <ul style="list-style-type: none"> <li>(a) EIS;</li> <li>(b) RTS;</li> <li>(c) site layout plans and drawings in the EIS (see Appendix A);</li> <li>(d) MOD 1;</li> <li>(e) MOD 2</li> <li>(f) MOD 3</li> <li>(g) MOD 4 and</li> <li>(h) MOD 5</li> <li>(i) conditions of this consent</li> </ul>	G	Statement	Compliant	<p><b>Dec 2019 Note:</b></p> <p>Kurnell Terminal Final Stage 2 OEMP was to be submitted 6 weeks prior to the project ending on 30 November and updated to include the LT EMP for the ACS Containment Cell. With delays foreseen in the completion of the ACS Containment Cell, approval was obtained from the DPIE to extend the submission date for the OEMP to 14 February 2020.</p> <p><b>2020 Update:</b> Submission of Stage 2 Terminal OEMP &amp; Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020.</p>

					<p>Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted.</p> <p>Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p> <p>DPIE approved extension of submission date to mid-March 2021</p>
B7B	Notwithstanding Condition B7A, the <a href="#">ACS Management works must not extend beyond 30 November 2019</a>	D	Completed	Compliant	<b>Re MOD6 Submission:</b>
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(g) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the EIS;</li> <li>• SEE and MOD 1;</li> <li>• MOD 2 and its accompanying documents;</li> <li>• MOD 3 and its accompanying documents</li> <li>• MOD 4 and its accompanying documents</li> <li>• MOD 5 and its accompanying documents</li> <li>• current statutory approvals for the Development;</li> <li>• approved strategies plans or programs;</li> </ul> <p>a summary of the monitoring results of the Development, which have been reported in accordance with the various</p>	D	Completed	Compliant	<p>A further extension to the project end date (March 2020) has been approved by DPIE</p>

**SSD 5544 MOD6 21 January 2020 - Extension of ACS Management Works Period**

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	Conditions	Applicable Phase: Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	Activity Status: Completed Active/ongoing Inactive	Compliance Status Compliant Not Compliant Not Triggered	Comments/Actions
B2	The Applicant shall carry out the Development generally in accordance with the:  (a) EIS; (b) RTS; (c) site layout plans and drawings in the EIS (see Appendix A); (d) MOD 1; (e) MOD 2 (f) MOD 3 (g) MOD 4 (h) MOD 5 and (i) MOD 6 (i) conditions of this consent	D	Completed	Compliant	<b>2020 Update:</b> Both the capping of the ASC Containment Cell and the demolition works <u>concluded</u> as of 31 March 2020
B7B	Notwithstanding Condition B7A, the <a href="#">ACS Management works must not extend beyond 31 March 2020</a>	D	Completed	Compliant	

D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(h) make the following information publicly available on its website:</p> <ul style="list-style-type: none"> <li>• the EIS;</li> <li>• SEE and MOD 1;</li> <li>• MOD 2 and its accompanying documents;</li> <li>• MOD 3 and its accompanying documents</li> <li>• MOD 4 and its accompanying documents</li> <li>• MOD 5 and its accompanying documents</li> <li>• MOD 6 and its accompanying documents</li> <li>• current statutory approvals for the Development;</li> <li>• approved strategies plans or programs;</li> <li>• a summary of the monitoring results of the Development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;</li> <li>• a complaints register, updated on a quarterly basis;</li> <li>• copies of any annual reviews (over the last 5 years);</li> <li>• any independent environmental audit, and the Applicant's response to the recommendations in any audit; and</li> <li>• any other matter required by the Secretary; and</li> </ul> <p>(i) keep this information up-to-date,</p> <p>Note: This requirement does not require any confidential info to be made available to the public</p>	D	Completed	<p>Compliant</p> <p>All DPIE Approved EMP's and Management Plans available on Ampol Public website</p>	<p>Both the capping of the ASC Containment Cell and the demolition works have <u>concluded</u> as of 31 March 2020</p> <p>To be verified during 2021 IEA</p>
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**SSD5353 PORTS AND BERTHING UPGRADE** **Note: Project completed in 2015**

<b>SCHEDULE B – ADMINISTRATIVE CONDITIONS</b>					
	<b>Conditions</b>	<b>Applicable Phase:</b> Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	<b>Activity Status:</b> Completed Active/ongoing Inactive	<b>Compliance Status</b> Compliant Not Compliant Not Triggered	<b>Comments/Actions</b>
<b>TERMS OF CONSENT</b>					
B1	The Applicant shall carry out the development generally in accordance with the: (a) State Significant Development Application No_5353; (b) Environmental Impact Statement, Kurnell Ports and Berthing Facility (URS, February 2013); (c) Response to Submissions, Kurnell Ports and Berthing Facility (URS, June 2013); (d) Proposed Change to the Kurnell Port and Berthing Facility Upgrade (SSD: 5353) (URS, 30 August 2013); and (e) conditions of this consent.	C	Statement	Compliant	Not Applicable
B2	In the event of an inconsistency between: (a) the conditions of this consent and any document listed from condition B1(a) to B1(d) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and (b) any document listed from condition B1(a) to B1(d) inclusive, and any other document listed from condition B1(a) to B1(d) inclusive, the most recent document shall prevail to the extent of the inconsistency.	G	Completed	Compliant	
B3	The Applicant shall comply with any reasonable requirement(s) of the Director General arising from the Department's assessment of: (a) any reports, plans or correspondence that are submitted in accordance with this consent; and (b) the implementation of any actions or measures contained within these reports, plans or correspondence.	G	Completed	Compliant Since the IEA (April 2016), the non-compliances have been responded to by Caltex to the satisfaction of the DPIE	
B4	Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection on request.	G	Completed	Compliant	

	<b>LIMITS OF CONSENT</b>				
B5	The Applicant may carry out dredging for a period of no more than six (6) months, unless otherwise agreed to in writing by the Director-General.	C	Completed	Compliant	
	<b>LAPSING OF CONSENT</b>				
B6	This consent shall lapse five (5) years from the date of this approval unless the works associated with the development have physically commenced.	C	Completed	Compliant	
	<b>STATUTORY REQUIREMENTS</b>				
B7	The Applicant shall ensure that all licences, permits and approval/consents are obtained as required by law and maintained as required throughout the life of the Development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approval/consents.	G	Completed	Compliant	
	<b>STAGING</b>				
B8	The Applicant may elect to construct and/ or operate the Development in stages. Where staging is proposed, the Applicant shall submit a Staging Report to the Director General prior to the commencement of the first proposed stage. The Staging Report shall provide details of: (a) how the Development would be staged, including general details of work activities associated with each stage and the general timing of when each stage would commence; and (b) details of the relevant conditions of consent, which would apply to each stage and how these shall be complied with across and between the stages of the Development.	C	Inactive	Not triggered.	
B9	Where staging of the Development is proposed, these conditions of consent are only required to be complied with at the relevant time and to the extent that they are relevant to the specific stage(s).	C	Inactive	Not triggered.	
B10	The Applicant shall ensure that an updated Staging Report (or advice that no changes to staging are proposed) is submitted to the Director General prior to the commencement of each stage, identifying any changes to the proposed staging or applicable conditions.	C	Inactive	Not triggered.	



B11	The Applicant shall ensure that all plans, sub-plans and other management documents required by the conditions of this consent and relevant to each stage (as identified in the Staging Report) are submitted to the Director General no later than one month prior to the commencement of the relevant stages, unless otherwise agreed by the Director General. Note: Conditions B8 to B11 do not relate to staged development within the meaning of section 83B of the Act.	C	Plan Completed & Approved	Compliant	
B12	The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.	C	Completed	Compliant	
B13	The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the site, including contractors, sub-contractors and visitors.	G	Completed	Compliant	
B14	In the event of a dispute between the Applicant and a public authority, in relation to an applicable requirement in this consent or relevant matter relating to the Development, either party may refer the matter to the Director General for resolution. The Director General's determination of any such dispute shall be final and binding on the parties.	G	Statement	Compliant	
<b>SCHEDULE C – ENVIRONMENTAL PERFORMANCE AND MANAGEMENT</b>					
<b>SEDIMENT, WATER QUALITY AND HYDROLOGY</b>					
C1	The Development shall comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters, except as expressly provided in an EPL.	G	Statement	Compliant	
C2	The Applicant shall implement all feasible and reasonable mitigation and management measures for the duration of dredging to minimise the dispersion of dissolved and sediment-bound TBT and suspended sediment concentrations outside the Development site during construction, including: (a) no overflow dredging within the fixed berths and in the front of the submarine berths; and(b) installing and maintaining a silt boom around the dredger head to capture sediment that falls into the water across the slewing zone.	C	Completed	Compliant	

	Sediment and Water Quality Management Plan				
C3	<p>Prior to commencement of construction, or as otherwise agreed by the Director-General, the Applicant shall prepare (and implement following approval) a Sediment and Water Quality Management Plan in consultation with the EPA and DPI (Fisheries). The Plan must:</p> <p>(a) be prepared by a suitably qualified expert and be approved in writing by the Director-General;</p> <p>(b) identify representative monitoring locations which can be used to determine the extent to which TBT in the water column (dissolved) and sediment-bound TBT, suspended sediment concentrations, pH and Dissolved Oxygen generated and dispersed by dredging has affected the distribution and condition of sensitive marine receivers;</p> <p>(c) identify specific measures to minimise the generation and dispersion of these sediments outside the Development site during dredging in addition to those identified in Condition C2;</p> <p>(d) include dry weather baseline water quality monitoring data at these locations, including dissolved and sediment-bound TBT and suspended sediment concentrations against which levels during construction can be compared; (e) include a sediment and water quality monitoring program to be followed during and post dredging including the frequency and procedures for water quality monitoring (including in real-time) of dissolved and sediment bound TBT and suspended sediment concentrations, and other water quality parameters at the identified water quality monitoring locations; and</p> <p>(f) establish upper threshold water quality performance criteria and interim threshold water quality performance criteria and identify contingency measures to be implemented where these water quality performance criteria are triggered at sensitive marine receivers, including temporarily ceasing and reducing the rate of dredging (including overflow dredging) operations.</p>	C	Completed	<p>Compliant</p> <p>Identified as an Administrative Non-Compliance in 2016 IEA</p> <p>Actions verified in 2017 IEA</p>	

C4	Within three (3) months of completing the post-dredging water quality monitoring required by Condition C3(e), the Applicant shall submit a report to the Director-General, the EPA, DPI (Fisheries) and SPC documenting the results of the baseline water quality monitoring undertaken before construction and the sediment and water quality monitoring program to be followed during and post dredging, to confirm that residual sediment and water quality is consistent with the predictions made in the EIS, with particular consideration to dissolved and sediment-bound TBT concentrations and impacts to the aquatic health of sensitive marine receivers (condition C8	C	Completed	Compliant  Identified as an Administrative Non-Compliance in 2016 IEA  Actions verified in 2017 IEA	
<b>BIODIVERSITY</b>					
<b>Aquatic Weeds</b>					
C5	The Applicant shall implement all mitigation and management measures during construction to avoid the introduction or spreading of pest flora and fauna species including <i>Caulerpa taxifolia</i> consistent with the NSW Control Plan for the Noxious Marine Alga <i>Caulerpa taxifolia</i> (DII, 2009).	G	Statement	Compliant	
<b>Marine Fauna</b>					
C6	The Applicant shall implement measures and management to minimise the risk of ship collision and minimise underwater noise generation with marine fauna with particular consideration of cetaceans, pinnipeds, marine turtles and dugongs. This shall include (but not necessarily be limited to): (a) carrying out observations for cetaceans, pinnipeds, marine turtles and dugongs within 420 metres of dredging, piling or rock revetment works; (b) temporary cessation of dredging and dredger tugboat reduced to a speed of 4 knots if the marine fauna comes within the 420 metres of dredging; (c) the temporary cessation of underwater noise generating activities associated with piling and rock revetment where marine fauna comes within the 250 metres of these activities. Noise generating activities shall not recommence until 30 minutes after the fauna has left the zone; and (d) the temporary cessation of dredging where marine fauna comes within the 150 metres of dredging. Dredging shall only recommence when marine fauna has moved out of this zone. Noise generating activities would not commence until 30 minutes following the fauna leaving the zone.	C	Completed	Compliant	

	<b>Ausgrid Seagrass Rehabilitation Plan</b>				
C7	Prior to commencement of construction, the Applicant shall notify DPI (Fisheries) and Ausgrid of the commencement date and schedule of dredging operations and keep them informed during dredging operations.	C	Completed	Compliant	
	<b>Aquatic Health Management Plan</b>				
C8	<p>Prior to commencement of construction, or as otherwise agreed by the Director-General, the Applicant shall prepare (and implement following approval) an Aquatic Health Management Plan in consultation with OEH and DPI (Fisheries). The Plan must:</p> <ul style="list-style-type: none"> <li>(a) be prepared by a person who has been approved in writing by the Director-General;</li> <li>(b) include baseline aquatic surveys and data to confirm the distribution and condition of sensitive marine receivers, with appropriate consideration of seasonal variations, and identification of potential no-go areas;</li> <li>(c) identify representative monitoring locations which can be used to determine the distribution and condition of sensitive marine receivers, taking into account the Ausgrid seagrass rehabilitation project;</li> <li>(d) identify performance measures to assess the distribution and condition of the sensitive marine receivers during dredging; and</li> <li>(e) include an aquatic health monitoring program to be followed for the duration of dredging including the frequency and procedures for surveys, monitoring and visual observations.</li> </ul>	C	Completed	Compliant	
C9	Within twelve (12) months of completing the post dredging water quality monitoring required by Condition C3(e), unless otherwise agreed to in writing by the Director-General, the Applicant shall submit a report to the Director-General, EPA, OEH, DPI (Fisheries) and SPC setting out whether dissolved and sediment-bound TBT and suspended sediment concentrations generated and dispersed by dredging are likely to have affected the distribution and condition of the sensitive marine receivers compared to baseline conditions drawing on all sediment and water quality and aquatic health monitoring data required to be collected by conditions C3 and C8.	C	Completed	Compliant	

C10	If considered necessary by the Director-General, the Applicant shall identify rehabilitation (and monitoring) or offset measures to be implemented to compensate for any adverse impacts to sensitive marine receivers identified in the report required by condition C9 attributable to the Development to the written satisfaction of the Director-General.	C	Completed	Compliant	
<b>COASTAL AND HYDRODYNAMICS</b>					
C11	Pre, during and post dredging, the Applicant shall (unless otherwise agreed to in writing by the Director General) undertake monitoring of coastal and hydrodynamic processes on Silver Beach.	C	Completed	Compliant	
C12	Within three (3) months of completing the post dredging monitoring, the Applicant shall submit a report to the Director General and SPC documenting the results of this monitoring to confirm that impacts to coastal and hydrodynamic processes on Silver Beach are no greater than those predicted in the EIS and will not result in significant ongoing residual impacts to the beach (including impacts to associated aquatic habitat such as intertidal habitat at Silver Beach).	C	Completed	Compliant  Identified as an Administrative Non-Compliance in 2016 IEA  Actions verified in 2017 IEA	
C13	Where Development related impacts are identified to be significantly higher than those predicted, the Applicant shall identify measures to counteract any beach depletion impacts at Silver Beach and identify whether monitoring of other locations in Botany Bay are warranted and/or require rehabilitation.	C	Statement	Not Triggered	
C14	If considered necessary by the Director-General, the Applicant shall identify rehabilitation (and monitoring) or offset measures to be implemented to compensate for any adverse impacts to coastal and hydrodynamic processes identified in the report required by condition C13 attributable to the Development to the written satisfaction of the Director-General.	C	Completed	Compliant	

NOISE AND VIBRATION					
Construction Hours					
C15	With the exception of dredging and sub berth upgrade works, all construction works including all high noise generating works (such as piling and rock revetment) shall be confined to standard working hours: (a) 7:00am to 6:00pm Mondays to Fridays, inclusive; and (b) 8:00am to 1:00pm Saturdays; and (c) at no time on Sundays or public holidays. The upgrade of the sub berth may be undertaken during the additional hours of 1.00 pm and 6.00 pm on Saturdays and 8.00 am and 6.00 pm on Sundays. Dredging associated with the Development may be undertaken on a 24 hour basis, 7 days a week.	C	Completed	Compliant	
C16	Construction works outside of the work hours identified in condition C15 may be undertaken in the following circumstances: (a) works that are inaudible at nearest sensitive land receivers; (b) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; (c) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm; (d) works approved through an approved EPL; or (e) works as approved through the out-of-hours work protocol outlined in the Construction Noise and Vibration Management Plan required under condition C36(b).	C	Completed	Compliant	
Construction Noise and Vibration					
C17	The Development shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (DECC, 2009). All feasible and reasonable noise mitigation measures shall be implemented and any activities that could exceed the construction noise management levels shall be identified and managed in accordance with the Construction Noise and Vibration Management Plan required under condition C36(b). This shall include the implementation of respite periods in response to noise complaints, particularly in relation to high noise generating activities (including piling and rock revetment).	C	Completed	Compliant	

C18	The Applicant shall undertake attended monitoring on a monthly basis during construction works outside of standard construction hours and at the commencement of and during high noise generating works (including piling and rock revetment) to confirm noise levels at residences along Prince Charles Parade and at the Ranger's residence at Kamay Botany Bay National Park.	C	Completed	Compliant	
C19	The Development shall be <u>constructed</u> with the aim of achieving the following construction vibration goals: (a) for structural damage, the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures; and (b) for human exposure, the acceptable vibration values set out in the Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006).	C	Statement	Not triggered Identified as a Low Risk Non-Compliance in 2016 IEA.  Actions verified in 2017 IEA	
<b>HERITAGE MANAGEMENT</b>					
<b>Maritime Management</b>					
C20	Prior to the commencement of construction, the Applicant shall commission an appropriately qualified maritime archaeologist to: (a) undertake magnetic or side sonar scans of the Development site to determine the presence of any previously unidentified items of maritime heritage (including ship wrecks) to the satisfaction of the Heritage Council of NSW; and (b) should any items be identified, develop a management strategy for the items during the construction and operation of the Development in consultation with the Heritage Council of NSW.	C	Completed	Compliant	
C21	The management strategy shall be submitted for the Director General's approval providing written evidence of consultation and agreement with the recommendations from the Heritage Council of NSW. Construction must not commence in the area where items have been uncovered until written approval has been received from the Director General for the management strategy.	C	Completed	Compliant	
<b>Archival Record</b>					
C22	Prior to the commencement of construction, the Applicant shall commission an appropriately qualified heritage expert to undertake archival recording of the existing fabric and operation of the Kurnell Wharf, in particular the existing infrastructure at Fixed Berth 1, which would be replaced as part of	C	Completed	Compliant	

	the Development. The archival recording shall be submitted to the Heritage Council of NSW Library prior to the removal or demolition of any existing elements.				
	<b>Potential for Discovery of Aboriginal and Non-Aboriginal Heritage Objects</b>				
C23	If during the course of <u>construction</u> , the Applicant becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the Heritage Act 1977. Relevant works shall not recommence until written authorisation from the Heritage Council of NSW is received by the Applicant.	C	Statement	Not triggered	
C24	If during the course of construction the Applicant becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEHL informed in accordance with section 89A of the National Parks and Wildlife Act 1974. Relevant works shall not recommence until written authorisation from OEHL is received by the Applicant.	C	Statement	Not triggered	
	<b>AIR QUALITY MANAGEMENT</b>				
	<b>Odour Impacts</b>				
C25	The Applicant shall implement an odour screening protocol for sediments excavated during dredging and implement all feasible and reasonable mitigation measures to ensure that odour generation during dredging do not exceed an odour limit of 2 odour units at the nearest residential receivers during the construction works.	C	Statement	Not triggered	



	<b>Dust Generation</b>				
C26	The Applicant shall implement all feasible and reasonable mitigation measures to ensure that the Development is constructed in a manner that minimises dust emissions from the site, including wind-blown and traffic-generated dust and tracking of material onto public roads. All works shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, the Applicant shall identify and implement all feasible and reasonable dust mitigation measures, including cessation of relevant works, as appropriate, such that emissions of visible dust cease	C	Project Completed	Compliant	Project finished in 2015
	<b>TRANSPORT AND ACCESS</b>				
	<b>Construction Access</b>				
C27	The designated construction access route for the delivery of materials for construction purposes shall be via Captain Cook Drive, Prince Charles Parade and Solander Street. Unless otherwise agreed to by the Director General (supported by appropriate traffic and transport justification), at no time shall construction vehicles use residential streets in Kurnell for construction access. Should any additional roads be agreed to by the Director General for construction access, these roads would be subject to the requirement for a road dilapidation survey and report to be prepared prior to their use as identified in condition C28.	C	Project Completed	Compliant	

	<b>Road Dilapidation</b>				
C28	Prior to the commencement of construction, The Applicant shall commission an independent and qualified person or team to undertake a road dilapidation survey of all roads proposed to be used for construction material haulage as specified in condition C27 and prepare a Road Dilapidation Report. The report shall assess the current condition of the road and describe mechanisms to restore any damage that may result due to traffic and transport related to the construction of the Development. The Report shall be submitted to the relevant road authority for review prior to the commencement of construction vehicle haulage. Following completion of construction, a subsequent report shall be prepared to assess any damage that may have resulted from the construction of the Development. Measures undertaken to restore or reinstate roads affected by the Development shall be undertaken in a timely manner, in accordance with the reasonable requirements of the relevant road authority, and at the full expense of the Applicant.	C	Completed	Compliant  Identified as an Administrative Non-Compliance in 2016 IEA  Actions verified in 2017 IEA	
C29	The Applicant shall provide sufficient parking facilities at its temporary laydown facility for construction personnel and heavy vehicles to ensure that construction traffic associated with the Development does not utilise public and residential streets or public parking facilities for parking.	C	Statement	Not triggered	
	<b>PROPERTY IMPACTS</b>				
C30	Any damage caused to property or public infrastructure as a result of the Development shall be rectified or the property or asset owner appropriately compensated, within a reasonable timeframe, with the costs borne by the Applicant.	C	Statement	Not triggered	
	<b>WASTE MANAGEMENT</b>				
	<b>Waste Management On-site</b>				
C31	The Applicant shall not cause, permit or allow any waste generated outside the site to be received at the site for storage, treatment, processing, reprocessing, or disposal on the site, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997, if such a licence is required in relation to that waste.	C	Statement	Not triggered	

C32	The Applicant shall maximise the reuse and/or recycling of waste materials generated on site, to minimise the need for treatment or disposal of those materials outside the site.	C	Statement	Not triggered	
C33	The Applicant shall ensure that all liquid and/or non-liquid waste generated on the site is assessed and classified in accordance with Waste Classification Guidelines (DECC, 2008), or any future guideline that may supersede that document and where removed from the site is only directed to a waste management facility lawfully permitted to accept the materials.	C	Statement	Not triggered	
<b>ENVIRONMENTAL REPRESENTATIVE</b>					
C34	<p>Prior to the commencement of <u>construction</u>, or as otherwise agreed by the Director General, the Applicant shall nominate for the approval of the Director General a suitably qualified and experienced Environmental Representative(s) that is independent of the design, construction and operational personnel. The Applicant shall employ the Environmental Representative(s) for the duration of construction, or as otherwise agreed by the Director General. The Environmental Representative(s) shall:</p> <p>(a) be the principal point of advice in relation to the environmental performance of the Development;</p> <p>(b) monitor the implementation of environmental management plans and monitoring programs required under this consent and advise the Applicant upon the achievement of these plans/ programs;</p> <p>(c) have responsibility for considering and advising the Applicant on matters specified in the conditions of this consent, and other licences and consents related to the environmental performance and impacts of the Development;</p> <p>(d) be given the authority to review and confirm whether works associated with the Development are classified as Construction (or not) under this development consent, and if classified as Construction, advise on the relevant pre-Construction and Construction requirements that the works would be subject to under this consent;</p> <p>(e) be given the authority to approve/ reject minor amendments to the Construction Environment Management Plan. What constitutes a “minor”</p>	C	Completed	Compliant	<p><b>2020 Note:</b></p> <p>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</p> <p>Responsibilities for monitoring the environmental performance of the Kurnell Terminal rests with:</p> <ul style="list-style-type: none"> <li>• Terminal Operations Manager and;</li> <li>• Senior Environmental Specialist and;</li> <li>• Environmental Management Systems Specialist.</li> </ul> <p>Terminal operations remain compliant against the requirements of the Terminal Operational Environmental Management Plan (OEMP)</p>

	<p>amendment shall be clearly explained in the Construction Environmental Management Plan required under condition C35;</p> <p>(f) be given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur; and</p> <p>(g) be consulted in responding to the community concerning the environmental performance of the Development where the resolution of points of conflict between the Applicant and the community is required.</p>				
<b>CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN</b>					
C35	<p>Prior to the commencement of <u>construction</u>, or as otherwise agreed by the Director General, the Applicant shall prepare and implement (following approval) a Construction Environmental Management Plan for the Development. The Plan shall outline the environmental management practices and procedures that are to be followed during construction, and shall be prepared in consultation with the relevant government agencies and in accordance with the Guideline for the Preparation of Environmental Management Plans (Department of Infrastructure, Planning and Natural Resources, 2004). The Plan shall include, but not necessarily be limited to:</p> <p>(a) a description of activities to be undertaken during construction of the Development (including staging and scheduling);</p> <p>(b) statutory and other obligations that the Applicant is required to fulfil during construction, including approval/consents, consultations and agreements required from authorities and other stakeholders under key legislation and policies;</p> <p>(c) a description of the roles and responsibilities for relevant employees involved in the construction of the Development, including relevant training and induction provisions for ensuring that employees, including contractors and sub-contractors are aware of their environmental and compliance obligations under these conditions of consent;</p>	C	Completed	<p>Compliant</p> <p>Identified as an Administrative Non-Compliance in 2016 IEA</p> <p>Actions verified in 2017 IEA</p>	

<p>(d) an environmental risk analysis to identify the key environmental performance issues associated with the construction phase; and</p> <p>(e) details of how environmental performance would be managed and monitored to meet acceptable outcomes, including what actions will be taken to address identified potential adverse environmental impacts (including any impacts arising from the staging of the construction of the Development). In particular, the following environmental performance issues shall be addressed in the Plan:</p> <ul style="list-style-type: none"> <li>(i) sediment and water quality management within the Bay;</li> <li>(ii) marine ecology management;</li> <li>(iii) noise and vibration;</li> <li>(iv) odour and air quality management;</li> <li>(v) traffic and access</li> <li>(vi) management of Aboriginal and non-Aboriginal heritage;</li> <li>(vii) waste management;</li> <li>(viii) emergency, including spill management;</li> <li>(ix) compounds and ancillary facilities management;</li> <li>(x) operational and navigation safety during construction within the Bay; and</li> <li>(xi) means for assessing (and where identified) for managing interactions and cumulative impacts from the concurrent construction of other development works in the area should these coincide with the Development (e.g. the Caltex Refinery upgrade works).</li> </ul> <p>(f) The Plan shall be submitted for the approval of the Director General prior to the commencement of construction. The Plan may be prepared in stages, however, construction works shall not commence until written approval has been received from the Director General. The approval of a Construction Environmental Management Plan does not relieve the Applicant of any requirement associated with this development consent. If there is an inconsistency with an approved Construction Environmental</p> <p>Management Plan and the conditions of this development consent, the requirements of this development consent prevail.</p>				
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C36	<p>As part of the <b>Construction Environmental Management Plan</b> for the Development required under condition C35 the Applicant shall prepare and implement (but not necessarily be limited to) the following:</p> <p>(a) a <b>Dredging and Spoil Management Plan</b> to address the management of sediment and water quality during dredging within the Bay, prepared in consultation with the EPA and including, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) a Sediment and Water Quality Monitoring Program in accordance with the requirements of condition C3;</li> <li>(ii) measures to address the management and monitoring of any potential acid sulphate soils excavated during dredging in the Bay to prevent their oxidation into actual acid sulphate soils prior to: <ul style="list-style-type: none"> <li>final re-use or disposal, including contingency measures to be implemented in case of acid generation; and</li> </ul> </li> <li>(iii) a Spill Control Plan;</li> </ul> <p>(b) a <b>Construction Noise and Vibration Management Plan</b> to detail how construction noise and vibration impacts will be minimised and managed. The Plan shall be consistent with the guidelines contained in the Interim Construction Noise Guidelines (DECC, 2009) be prepared in consultation with the EPA. The Plan shall include, but not necessarily be limited to:</p> <ul style="list-style-type: none"> <li>(i) identification of sensitive land receivers and relevant construction noise and vibration goals applicable to the Development stipulated in this consent;</li> <li>(ii) details of construction activities and an indicative schedule for construction works; including the identification of key noise and/or vibration</li> </ul> <p>Generating construction activities (based on representative construction scenarios, including at ancillary facilities) that have the potential to generate noise and/or that have the potential to generate noise and/or vibration impacts on surrounding sensitive land receivers, particularly residential areas that have the potential to generate noise and/or vibration impacts on surrounding sensitive land receivers, particularly residential areas;</p> <ul style="list-style-type: none"> <li>(iii) identification of feasible and reasonable measures proposed to be implemented to minimise and manage construction noise and vibration impacts with particular consideration to works outside of standard construction hours;</li> <li>(iv) a description of how the effectiveness of these actions and measures would be monitored during the proposed works, clearly indicating how often his monitoring would be conducted, the locations where monitoring would</li> </ul>	C	Completed	Compliant	
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	<p>take place, how the result of this monitoring would be recorded and reported, and, if any exceedance is detected, how any non-compliance would be rectified; and</p> <p>(v) an out-of-hours work (OOHW) protocol for the assessment, management and approval of works outside of standard construction hours (not already allowed under this consent) as defined in condition C16, including a risk assessment process under which an Environmental Representative may approve out-of-hour construction activities deemed to be of environmental risk and refer high risk works for the Director General's approval. The OOHW protocol shall detail standard assessment, mitigation and notification requirements for high and low risk out-of-hour works, and detail a standard protocol for referring applications to the Director General;</p> <p>(c) an <b>Air Quality Management Plan</b> outlining procedures to be implemented to monitor and manage odour and dust generation from the Development site in accordance with conditions C25 and C26; and</p> <p>d) a <b>Construction Traffic and Access Management Plan</b> to manage and minimise access and traffic impacts associated with the Development particular to residential streets at Kurnell, focusing on those periods (such as the concrete pour period) when peaks in traffic generation are expected to occur. The sub-plan shall include, but not necessarily be limited to:</p> <p>(i) identification of designated construction traffic access routes and periods of high traffic generation;</p> <p>(ii) details of designated vehicle parking, turning areas and ingress and egress points into temporary construction work compounds/ laydown areas; and</p> <p>(iii) how shift changes and delivery times shall be restricted to standard day time hours where practicable; (iv) details of management measures to minimise traffic impacts, including avoiding vehicle queuing and parking on public roads, safe pedestrian access and disruptions to traffic.</p>				
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	<b>SCHEDULE D – COMMUNITY INFORMATION AND REPORTING</b>				
	<b>COMMUNITY INFORMATION AND REPORTING</b>				
	<b>COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT</b>				
	<b>Community Consultation</b>				
D1	The Applicant shall continue the existing community consultative committee for the life of the Development with the Kurnell community.	C	Active/ongoing	Compliant	Refer to comments in D3
D2	<p>Prior to the commencement of <u>construction</u> the Applicant shall prepare (and following approval) implement a Community Consultation Plan, for the approval of the Director General to identify the consultation and notification procedures that would be undertaken during the construction of the Development to keep the general community and stakeholder groups informed of the construction works and measures to minimise impacts to these groups. The Plan shall include but not be limited to:</p> <p>(a) identification of key stakeholder groups that require notification and engagement on the construction works including (but not necessarily limited to):</p> <ul style="list-style-type: none"> <li>(i) recreational users of the Bay such as recreational fishing and boating groups and divers;</li> <li>(ii) users of Silver Beach;</li> <li>(iii) residents along Prince Charles Parade;</li> <li>(iv) the local community at Kurnell;</li> <li>(v) DPI (Fisheries) personnel working on the Ausgrid cable laying project seagrass rehabilitation site; and</li> <li>(vi) Local Council;</li> </ul> <p>(b) key matters on which these stakeholders groups would be kept informed of including: the commencement of construction works, access restrictions and exclusion zones within the Bay and near Silver Beach, the commencement and location of dredging, high noise generating works, traffic disruptions and means for providing comment or complaints on the Development;</p> <p>(c) procedures for engagement with and notification of these stakeholder groups by means that best targets each stakeholder group (e.g. on site signage, newspaper notifications, letter box drops, website updates, community meetings, notifications in stakeholder specific websites such as recreational fishing posts etc.), including frequency of notification; and</p>	C	Completed	Compliant	<p><b>2020 Update:</b></p> <p>The Kurnell terminal continues to use the Community Consultation/Engagement Plan.</p> <p>COVID 19 restrictions prevented the quarterly on-site Community meetings</p> <p>The Plan was reviewed at the end of the Demolition works in 2020</p>



	(d) the means for ongoing engagement (as required) with relevant public authorities (e.g. EPA, OEH, DPI (Fisheries), Sydney Ports Corporation, Council and the Department) and notification in the case of an environmental incident.				
	<b>Complaints and Enquiries Procedure</b>				
D3	Prior to the commencement of <u>construction</u> , or as otherwise agreed by the Director General, the Applicant shall ensure that the following are available for community enquiries and complaints for the duration of construction: (a) a 24 hour telephone number(s) on which complaints and enquiries about the Development may be registered; (b) a postal address to which written complaints and enquires may be sent; (c) an email address to which electronic complaints and enquiries may be transmitted; and (d) a mediation system for complaints unable to be resolved.	G	Active/ongoing	Compliant	Terminal Community Hotline and complaints management requirements established
D4	The telephone number, the postal address and the email address shall be published in newspaper(s) circulating in the local area prior to the commencement of construction and prior to the commencement of operation. This information shall also be provided on the website (or dedicated pages) required by this consent.	G	Completed	Compliant	
D5	Prior to the commencement of <u>construction</u> , or as otherwise agreed by the Director General, the Applicant shall prepare and implement a Construction Complaints Management System consistent with AS 4269: Complaints Handling and maintain the System for the duration of construction and up to 12 months following completion of the Development. Information on all complaints received, including the means by which they were addressed and whether resolution was reached, with or without mediation, shall be maintained as part of the System and included in the construction compliance reports required by this consent. The information contained within the System shall be made available to the Director General on request.	G	Completed	Compliant	

	Provision of Electronic Information				
D6	<p>Prior to the commencement of construction, or as otherwise agreed by the Director General, the Applicant shall establish and maintain a new website, or dedicated pages within an existing website, for the provision of electronic information associated with the Development, for the duration of construction and for 12 months following completion of the Development. The Applicant shall, subject to confidentiality, publish and maintain up-to-date information on the website or dedicated pages including, but not necessarily limited to:</p> <ul style="list-style-type: none"> <li>(a) information on the current implementation status of the Development;</li> <li>(b) a copy of the documents referred to under condition B1 of this consent, and any documentation supporting modifications to this consent that may be granted from time to time;</li> <li>(c) a copy of this consent and any future modification to this consent;</li> <li>(d) a copy of each relevant environmental approval/consent, licence or permit required and obtained in relation to the Development;</li> <li>(e) a copy of each current strategy, plan, program or other document required under this consent;</li> <li>(f) the outcomes of compliance tracking in accordance with condition D7 of this consent; and</li> <li>(g) details of contact point(s) to which community complaints and enquiries may be directed, including a telephone number, a postal address and an email address.</li> </ul>	G	Active/ongoing	Compliant	Refer to <a href="#">Ampol Public Website</a>

COMPLIANCE MONITORING AND TRACKING					
Compliance Tracking program					
D7	<p>The Applicant shall develop and implement a Compliance Tracking Program to track compliance with the requirements of this consent. The Program shall be submitted to the Director General for approval prior to the commencement of construction and operate for a minimum of one year following commencement of operation, subject to the Director General's review of the outcomes of the environmental auditing referred to in condition F1. The Program shall include, but not necessarily be limited to:</p> <p>(a) provisions for the notification of the Director General prior to the commencement of construction and prior to the commencement of operation of the Development (including prior to each stage, where works are being staged);</p> <p>(b) provisions for periodic review of the compliance status of the Development against the requirements of this consent;</p> <p>(c) provisions for periodic reporting of compliance status to the Director General, including a Pre- Construction Compliance Report, construction reporting, and a Pre-Operation Compliance Report;</p> <p>(d) a program for independent environmental auditing in accordance with ISO 19011:2003 - Guidelines for Quality and/ or Environmental Management Systems Auditing during construction;</p> <p>(e) mechanisms for recording environmental incidents during construction and actions taken in response to those incidents;</p> <p>(f) provisions for reporting environmental incidents to the Director General and relevant public authorities during construction;</p> <p>(g) procedures for rectifying any non-compliance identified during environmental auditing, review of compliance or incident management; and</p> <p>(h) provisions for ensuring all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.</p>	G	Completed for the project	<p>Currently Compliant</p> <p>Identified as a Low Risk Non-Compliance in 2016 IEA.</p> <p>Actions verified in 2017 IEA</p> <p>Compliant in 2017 IEA</p>	<p><b>Note:</b></p> <p><b>Continued compliance to D7 will be assessed during 2021 IEA</b></p>

	<b>Incident Reporting</b>				
D8	The Applicant shall notify the Director General of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 24 hours of becoming aware of the incident. The Applicant shall provide full written details of the incident to the Director General within seven days of the date on which the incident occurred.	G	Active/ongoing	Compliant	Refer to Sections 1.6 and Table 12 of this report for details of the events reported to the EPA and DPIE
D9	The Applicant shall meet the requirements of the Director General to address the cause or impact of any incident, as it relates to this consent, reported in accordance with condition D8 of this consent, within such period as the Director General may require.	G	Project Completed	Compliant	
	<b>SCHEDULE E – OPERATION ENVIRONMENTAL MANAGEMENT</b>				
	<b>HAZARD AND RISK</b>				
	<b>Safety Management System</b>				
E1	At least two months prior to the commencement of commissioning, the Applicant shall update its Safety Management System to include any changes due to the development. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Director General upon request. The updated Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.	G	Completed  Safety Case was submitted to SafeWork NSW 13/1/17  SafeWork NSW Review undertaken again in 2019	Compliant	<b>2020 Update:</b>  Terminal continues to hold <i>Major Hazardous Facility</i> approval  Post MHF Licence Verification Audit conducted Dec 2020 – (SMA)
	<b>OPERATIONAL ENVIRONMENTAL MANAGEMENT</b>				
E2	Prior to the commencement of operation, the Applicant shall incorporate the Development into any existing environmental management systems administered by the Applicant and prepared in accordance with the AS/NZS ISO 14000 Environmental Management System series.	G	Completed	Compliant	

	SCHEDULE F – ENVIRONMENTAL MONITORING AND AUDITING				
	ENVIRONMENTAL MONITORING AND AUDITING				
F1	Environmental Auditing				
	<p>Within one year of the commencement of operations and for a period of at least 5 years thereafter (unless otherwise agreed to by the Director General), the Applicant shall fund a full independent environmental audit. The audit shall be undertaken by a suitably qualified person/team approved by the Director General. The audits shall be made publicly available and would:</p> <p>(a) be carried out in accordance with ISO 14010 – Guidelines and General Principles for Environmental Auditing and ISO 14011 – Procedures for Environmental Auditing;</p> <p>(b) assess compliance with the requirements of this consent, and other licences and approvals that apply to the development;</p> <p>(c) assess the construction against the predictions made and conclusions drawn in the development application and EIS;</p> <p>(d) review the effectiveness of the environmental management of the development, including any environmental impact mitigation works and mitigation implemented to address matters identified in previous audits; and</p> <p>(e) where required identify any additional or ongoing monitoring or mitigation measures to be put in place to manage residual environmental impacts associated with the Development. A copy of the audit report and the measures proposed by the Applicant to respond to matters identified in the audit including timeframe for their implementation shall be submitted for the Director General's approval within three months of the completion of the audit, unless otherwise agreed to by the Director General.</p>	G	<p>Completed First IEA conducted in April 16</p> <p>Second IEA Sept 2017</p>	<p>Compliant</p> <p>All actions assigned to findings from 2016 were verified during 2017 IEA</p> <p>Actions assigned to findings from 2017 IEA's have been completed.</p> <p>Note:</p> <p>Completed actions from 2017 IEA will be verified during 2021 IEA</p>	<p>2020 IEA deferred due to COVID 19 restrictions for on-site access.</p> <p>DPIE approval to defer to Jan 2021</p>

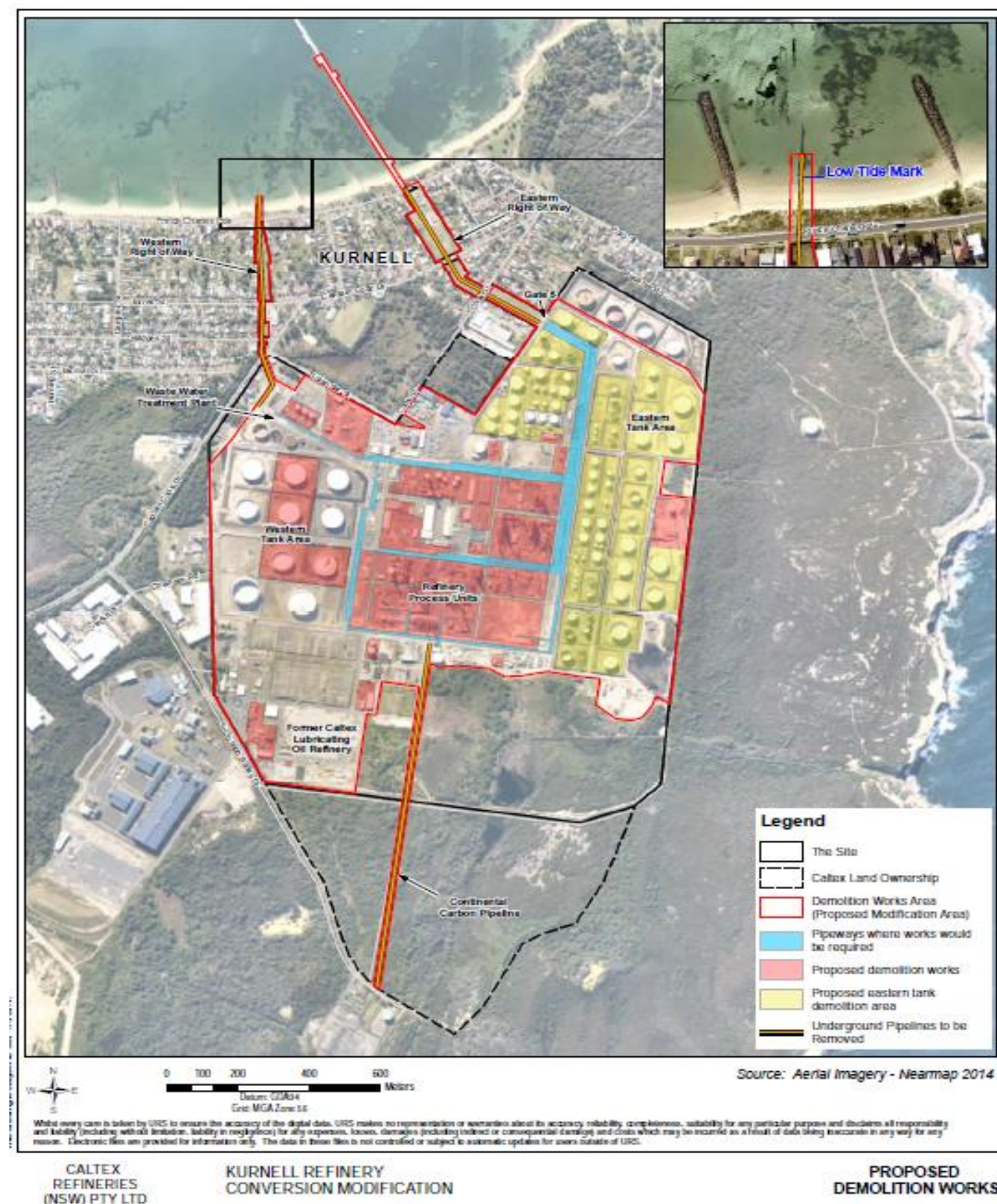
### APPENDIX 3 Kurnell Site Maps

Figure A – Kurnell Regional Context and SSD5544 Development Consent Boundaries





**Figure B - Demolition Work Zones**





**Figure C - Asbestos Contaminated Soil (ACS) Pipeway Areas and Containment Cell Location Plan**





