



## **2023 ANNUAL REVIEW ENVIRONMENTAL PERFORMANCE**

### **DEVELOPMENT APPLICATION SSD 5544**

**Ampol Australia Petroleum Pty Ltd**

**2 Solander Street  
Kurnell NSW 2231**

***Reporting Period: 1 January 2023 to 31 December 2023***

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## APPENDICES:

<b>Appendix 1</b>	Status of Ampol Actions Arising from Independent Environmental Audits - SSD 5544: <ul style="list-style-type: none"> <li>• IEA 27 Jan 2021;</li> <li>• IEA 2 September 2017 and;</li> <li>• IEA 1 April 2016</li> </ul>
<b>Appendix 2</b>	Environmental Performance against Active Consent Conditions - SSD5544 (Includes MOD1, 2, 3, 4, 5 and 6)
<b>Appendix 3.</b>	Kurnell Terminal Site Maps <p>Figure A. Kurnell Regional Context and SSD5544 Development Consent Boundaries</p> <p>Figure B Plot Plan A1-18588 titled “Environment Protection Licence Identification Points”, Version 7, dated 14 February 2020</p>

# 1 INTRODUCTION

Ampol Australia Pty Ltd – Kurnell Terminal (formally Caltex Refineries (NSW) Pty Ltd) has prepared this annual 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.*

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## **Development Definition:**

*The development as described in the EIS and RTS, and as generally depicted in Appendix A, being for the conversion of the existing Kurnell Refinery to a finished product import and distribution terminal*

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This Annual Review report presents a summary of the Terminal activities undertaken over the past twelve months, any proposed works for the next twelve months and the analysis and review of the site's environmental performance, as required in the Consent condition. This report is divided in three parts:

**Part 1** – Past Development Activities, specifically those relating to the Demolition works phase of the conversion and Terminal Environmental performance.

**Part 2** – 2023 Specific Terminal Environmental Monitoring and Performance

**Part 3** – Terminal Environmental Improvement Plan Outcomes and 2024 Plans

**Part 4** – Summary

**Appendix 1** - Status of Ampol actions arising from Independent Environmental Audits - SSD 5544 and SSD 5353 (IEA 2 September 2017, IEA 1 April 2016 and IEA January 2021)

**Appendix 2** – Environmental performance against any active Consent Conditions

**Appendix 3 – Maps**

- Figure A - Regional Context and Development Consent Boundaries
- Figure B - Plot Plan A1-18588 titled "Environment Protection Licence Identification Points", Version 6, dated 14 Feb 2020

***Please Note:***

*In line with advice from Pamela Morales, NSW DPE, all historical monitoring performance data covering the conversion and demolition phases of the Project (2014- 2019 period) have been removed from this and future Annual Review reports. Please refer to the 2022 Annual Review report for previously reported historical monitoring data covering the earlier periods of the project and associated trends over the life of the conversion project up to the end of the demolition phase in 2019.*

*The focus in this and future Annual Review reports will be on environmental performance and monitoring data associated with Terminal operation, relevant Engineering project works relating the Pollution Studies and Reduction Programs (PSRP) and Special Conditions (SC) associated with the Site's EPL (Lic №: 837), the site's Remediation Action Plan Strategy and other site improvement initiatives.*

## Part 1 - Past Development Activities And Terminal Environmental Performance

### 1.1 Development Summary

The overall works program associated with the Development Approval is summarised on Table 1.1 below. This table includes the commencement date and completion date for each activity under the Development Approval.

**Table 1.1 Overview of Development Activities to Date**

Activity	Start	Stop	Status
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	August 2019	Completed
Construction, Filling and Capping of ACS Containment Cell	October 2017	31 March 2020	Completed
Conversion Development Conclusion Date		31 March 2020	
<b>Operation of Finished Product Import and Distribution Terminal</b>	Operational from September 2014	Ongoing	

## 1.2 Development Activities During The Last Twelve Months

The continued operation of the Kurnell Terminal and associated project related works such as:

- Pollution Studies and Reduction Programs and Special Conditions set out in the site's EPL 837 in relation to the Kurnell flood event in April 2022, that is:
  - PRP U27- Stormwater Pipe Investigations and Rectifications
  - PRP U28 - Stormwater Management System upgrade
  - SC E18 - Waste Water treatment Plant - Odour Reduction Program
- SC E16 – Remediation Action Plan Strategy
- SC E17 - (ongoing) Tank Turnaround and Inspections (T&I) program works, and;
- ongoing Wharf Cathodic Protection Program works

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### **Development Definition:**

*The development as described in the EIS and RTS, and as generally depicted in Appendix A, being for the conversion of the existing Kurnell Refinery to a finished product import and distribution terminal*

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**TABLE 1.2 Potential Environmental Impacts - 2023 Development Activities**

Activity	Potential Environmental Impacts	Number of incidents
Operation of <u>Finished Product Import and Distribution Terminal</u> - referred to as Kurnell Terminal (the 'Site'), continues to operate in accordance with the NSW EPA EPL837 and SSD5544 conditions of consent	Soils and Groundwater contamination, Water (Surface), Air Quality (odour) and Asbestos (associated with remediation works), Waste, Noise (during ship berthing/product discharge activities at the Wharf)	Refer to Part 2. for incidents details relating to Terminal operations
Post 2022 flood incident mitigation works at the site's wastewater treatment plant and stormwater system upgrades and initiation of ecologist assessment work on the mangrove area in Quibray Bay	WWTP generated wastewater, Air Quality (odour), Soils and Groundwater contamination, Water (Surface), and Waste	Refer to Section 2.3 for details of odour complaints and mitigation measures
Tanks turnaround and inspections (T&I) – Insertion of Sleeves	Soils and Groundwater contamination, Water (Surface), Air Quality (odour) and Waste (construction)	Nil
Ongoing project works associated with the Kurnell Remediation Action Plan	Soils and Groundwater contamination, Water (Surface), Air Quality (odour) and Asbestos in soils (associated with remediation works), Waste	Nil
Wharf Cathodic Protection Program	Water (Marine Surface), Noise (during ship berthing/product discharge activities at the Wharf), Waste	

### 1.3 Terminal Environmental Management Controls

Consistent with the requirements of SSD5544 Approval (DPE), the Site and remediation project activities carried during the 2023 calendar year involved the implementation and maintenance of the controls and performance indicators detailed in the Site's *Stage 2 Final Operational Environmental Management Plan* (OEMP). The following environmental management sub plans are considered relevant to the ongoing Terminal operations, as referenced in D2 (d):



- Air Quality Management Sub Plan (Condition C28);
- Soil and Water Management Sub Plan (Condition C10 and C12);
- Noise Management Sub Plan (Condition C22);
- Traffic Management Sub Plan (Condition C36);
- Waste Management Sub Plan (Condition C40);
- Biodiversity, Weed and Pest Management Sub Plan (Conditions 42 & 43);

Final reviews and amendments were made to the Kurnell Terminal Operational Environmental Management Plan (OEMP) and above-mentioned Management Sub-Plans prior to the submission of the Stage Two Final OEMP to the NSW DPE on 7 March 2022.

The revised *Stage 2 Final Terminal OEMP* (including all Management Sub-Plans listed above and the ACS Cell LTEMP) was approved by the DPE on 8 April 2022.

Note: The approved OEMP (a redacted version), including the above-mentioned management sub plans is published on the Ampol Public Website, in accordance with the Development Approval requirements. All documents relating to past development activities and the Kurnell Terminal remain posted on the Ampol Public website and can also be accessed via:

[Kurnell Refinery Conversion Project](#)

## 1.4 Kurnell OEMP and Environmental Management Sub Plans - Objectives and Monitoring Requirements

The management plans prepared for the Site incorporate the mitigation measures specified in the EIS for Conversion and SEE for Terminal operations. Each management sub plan contains management actions, performance indicators and monitoring requirements.

### 1.4.1 Air Quality Management Sub Plan

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 Terminal 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 (EPL 837);
- Compliance with air quality Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs)
- 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 potentially odourous excavated material;
- 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 may 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 will be stopped wherever reasonably possible
- Asbestos fibre monitoring during excavations and other surface disturbances activities/area/s with the potential to generate air borne asbestos fibres
- 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 or work activities likely to generate airborne dust

#### 1.4.2 Noise Management Sub Plan

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, 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 (EPL837) L5 noise limits and the NSW Noise Policy for Industry
- Compliance with noise Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs)
- Compliance with relevant regulatory legal requirements (identified in the Site's OEMP, Appendix D)
- Work only carried out within the required hours and noise complaints managed in accordance with the Noise Management Sub Plan requirements.

Noise monitoring must be undertaken at the commencement of any work that has the potential to generate noise that could exceed the set EPL noise limits for the nearest residential sensitive receiver/s and at the nearest residential sensitive receiver downwind from the source.

The key noise monitoring requirements are:

- The *SoundScience Shipping Noise Monitoring (continuous) System* to monitor tanker ships berthed at the fixed berths (KUR1 and KUR2) installed at the Wharf
- During the initial stage of undertaking any high noise generating activities, and during where needed e.g. grit blasting (paint removal) in proximity (100m) to a specified residential receiver (R1-R8), noise measurement and monitoring will be carried.

- If high noise generating works are shown to exceed the set EPL noise limits and/or if noise complaints are received related to the high noise work, additional noise mitigation measures will be implemented for these activities (to ensure compliance with the set noise limits). These additional mitigations measures include:
  - The substitution of equipment or change the work procedure.
  - Acoustic screening wherever reasonably practical.
  - Changes to the start and finish work periods to reduce potential impacts to off-site nearest residential sensitive receiver to the source of noise and at the nearest residential sensitive receiver downwind from the source
  - 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 Site, 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 the Site's Noise Management Sub Plan for specific monitoring and mitigation measures for shipping noise management.

### 1.4.3 Waste Management Sub Plan

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

- Minimise the potential for impacts of waste generated because of the Site's operations and maximise the reuse and recycling of waste materials produced wherever possible with the disposal of waste materials to landfill considered as the last resort where all other options have been investigated
- Store, handle, transport, and dispose of waste in an environmentally responsible manner to 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 waste 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 of work permits
- Terminal operations to carry out inspections of its works areas to ensure any wastes, chemicals and hazardous materials are appropriately labelled, stored in accordance with dangerous goods and/or hazardous chemical requirements and all correct procedures are being implemented by employees and contractors

#### 1.4.4 Soil and Water Management Sub Plan

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

- Minimise the potential for impacts to surrounding water bodies and groundwater because of the Site's operations, 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)
- Compliance with soil and water Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs)

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 e.g. asbestos, Acid Sulphate Soil (ASS), etc.
- All stockpiles managed in accordance with the controls and mitigation measure detailed in the Plan, on work permits, work instructions and Job Safety Analysis
- Cover stockpiles where possible
- Inspection of all stockpiles for erosion and potential for dust generation
- 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 and Weed Management Sub Plan

The Biodiversity and Weed 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;
- Provide an integrated approach to the management of pests, weeds and vermin on the Site
- Compliance with the Sutherland Shire Council (SSC) pest, vermin and noxious weeds management requirements
- Compliance with the Site's EPL 837, as applicable to the use of chemicals, such as pesticides and herbicides.
- Compliance with biodiversity and weed Conditions of Consent (CoC) and associated Management and Mitigation Measures (MMMs).
- Compliance with relevant regulatory requirements (identified in the Site's 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 during weed spraying activities.

#### 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 are 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 (ACS CC) Long Term Environmental Management Plan

The Asbestos Contaminated Soil Containment Cell (ACSCC) has specific management plans that were developed in 2020, as part of MOD2 requirements. It is called the Long Term Environmental Management Plan (LTEMP).

The CCLTEMP aims to meet the following objectives:

- Identify potential environmental impacts associated with the ongoing management of the closed containment cell, and
- detail the procedures in place to ensure the waste within the containment cell remains contained and does not present a risk to human health and the environment following closure.

This CCLTEMP details the ongoing environmental management of the ACSCC, including:

- Maintenance of the capping and drainage.
- Groundwater monitoring (including groundwater quality and levels).

The CCLTEMP also includes physical details of the pipeways source area including:

- Location of the marker layer across the entire pipeways area.
- Depth of excavations and the marker layer.

**Note:** The LTEMP is included as Appendix K in the Stage Two Final Kurnell Terminal OEMP.

#### 1.4.8 Biosecurity Incident Response Management Plan

The Commonwealth Department of Agriculture, Water, and the Environment (DAWE) works to protect Australia’s natural resources and heritage through regulating biosecurity

preparedness and response arrangements. All aircraft, maritime vessels and military arriving in Australia through first point of entry (FPOE) must comply with the *Australian Commonwealth Gov't Biosecurity Act 2015*. The *Biosecurity Regulation 2016*, Section 58 provides for the control of biosecurity risks introduced by first point of entry operations, such as Ports.

The Kurnell Wharf is located to the west of the southern Kurnell Peninsula Headland and extends approximately 1 km into Botany Bay off Silver beach. It is the sole first point of entry (FPOE) for the Terminal's finished petroleum product imports. The Wharf is also used as a distribution point for some refined products, which are either shipped interstate or overseas. This area is used exclusively by Ampol for berthing and accessing of tanker ships to allow product unloading and loading to take place.

As a FPOE port, the Terminal is required to have in place a Biosecurity Incident Response Plan Management Plan and Shore Officer's trained in the detection and reporting of potential or actual biosecurity risks.

The Biosecurity Incident Response Management Plan (BIRMP) aims to meet the following objectives:

- manage the biosecurity risks associated with tanker ships and its cargo (bulk petroleum fuels)
- respond to and report biosecurity or human biosecurity incidents to the Port Botany Harbour Master and DAWR Biosecurity Officers
- support the Harbour Master and DAWR Biosecurity Officers to safely and effectively assess, inspect and treat goods and vessels under biosecurity control
- management the environment around the port of entry to reduce its receptivity to pests and diseases of biosecurity concerns
- management of biosecurity waste appropriately – refer to the Contain section and the Kurnell Terminal Shipping procedures

Nil amendments to the above-mentioned Management Sub-Plans were required in 2023.

The requirements detailed in the approved *Stage 2 Final OEMP*, inclusive of the Management Sub-Plans detailed above and the ACS Containment Cell LTEMP, applied to all aspects of site operations during the 2023 reporting period.

## 1.5 Development Activities For Next (2024) Calendar Year

The final phase (demolition and ACS CC construction/fill/cap) of the Kurnell refinery conversion to a finished product import and distribution terminal concluded on 31 March 2020. Therefore, there are no development activities (as defined in the SSD5544 Approval) planned for 2023 and beyond.

The Kurnell Terminal will continue to operate as a finished product import and distribution terminal with no site modifications planned at this point in time. Other planned project works at the Terminal include:

- Tank Turnaround and Inspection (T&I) works – in accordance with the Tank Maintenance (includes Tank Sleeve installation works) program
- Continuation of the PSRPs and SCs associated with the Site's Lic No: 837:
  - Remediation Strategy project work will continue throughout the upcoming year, operating under a number of Development Approval conditions issued by Sutherland Shire Council (SSC)
  - Wastewater Treatment Plant Odour Reduction Program
  - Stormwater Management System Upgrade
  - Quibray Bay Mangroves Ecological Assessment Works (CUN No: 3505381)
  - Wharf Cathodic Protection Program will continue into 2024



## PART 2 - 2023 Kurnell Terminal Environmental Monitoring And Performance

### 2.1 Terminal Operations During The Calendar Year

The Kurnell Finished Product Import and Distribution Terminal is the largest fuel terminal of its kind in Australia and continues to be a major supplier of transport fuels to NSW.

The Terminal continues to operate the site's Wastewater Treatment Plant (WWTP), which provides primary and secondary treatment, discharging treated aqueous effluent that meets the Site's EPL 837 licence conditions and set discharge limits for Sampling Point 27.

Refer to Tables 7A – 7F (five year period 2018 to 2023 inclusive) for the EPL Monitoring Points 15, 16, 27, 28 and 29 parameters and environmental performance details.

### 2.2 Terminal Environmental Management System Controls

Kurnell Terminal operations are governed by a comprehensive Environment Management System (EMS), in line with the Ampol Operational Excellence Management System (OEMS). OEMS Element 13 - Environmental Management, lists the minimum expectations set for each Ampol business group and their listed facilities. The site also remains certified against ISO9001:2015 QMS and ISO14001:2015 EMS.

#### 2.2.1 ISO1400:EMS and ISO9001:QMS

The site achieved recertification against ISO9001:2015 QMS and 14001:2015 EMS in May 2023 (certified by Lloyds Register Quality Assurance) with nil non-compliances or opportunities for improvement identified.

Details of the most recent surveillance visit and recertification audit specific to the EMS Standard are as follows:

**Table 2.1 Recent ISO Audits**

2022 - 2023 Audit Dates	ISO14001:2015 Findings	
	No. of Non-Conformance (NC)	Opportunities for Improvement Identified (OFI)
SV3 – November 2022	Nil	Two
Recertification Audit - May 2023	Nil	Nil

Note: Prior Lloyds Register Quality Assurance (LRQA) ISO14001 reports are available on request.

The Kurnell Terminal *Stage 2 Final* OEMP is supported by the Ampol Environment Policy, Ampol Operational Excellence Management System (OEMS) Element 13: Environmental

Management minimum expectations, Group environmental standards and guideline documents that inform the site's OEMP and Management Sub-Plans, as well as the ISO14001:2015 Standard.

The Site's OEMP Management Sub-Plans documents the relevant site specific environmental information, legal requirements and potential risk aspects and impact and controls pertaining to the terminal operations (includes wharf operations), as well as the recurrent project works e.g. Wharf Cathodic Protection Project; Tank Turnaround and Inspection (T&I) programs and Remediation project works (as they occur).

Each Engineering project is required to have a specific Environmental Management Plan, in line with the requirements of CD3247 'Environmental Management Plan Design for Projects'.

### 2.2.3 Kurnell Terminal Environmental Protection Licence (EPL 837)

As stated earlier, the site's environmental performance parameters are detailed in Environment Protection Licence (Lic №: 837). This licence describes the scheduled activities that are performed on the site, as well as the required environmental controls and monitoring activities. The monitoring section of the site licence describes six Monitoring or Discharge Points, as well as their set discharge and monitoring limits. Refer to Table 6. for details:

**TABLE 2.2 Description of 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"  <u>Note:</u> 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"
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"  <u>Note:</u> Discharge from wastewater treatment plant at Point 2. (submerged ocean outfall at Yena Gap)

EPA Identification No	Type of Monitoring or Discharge Point	Location Description
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 posted on the Ampol Public website. Details of the last six (6) years are included in this Annual Review report.

The pollutants monitored at these points; their licence concentration limits and monitoring results are presented as Tables 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 below.

## 2.3 Environmental Monitoring Performance

### 2.3.1 Terminal Monitoring Data

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

- Tables 7A - G show the summary of monitoring results for the licenced monitoring points 15, 16, 28 and 29 for the calendar years 2018 – 2023
- some data is represented in Figures 1 to 4

**Please note:**

Monitoring Points 28 and 29 were created during 2018, therefore only 6 years of data are available and depicted in Figures 3 and 4 respectively.

- Tables 8A - 8C contains the annual (2023) summary of the monitoring results for Monitoring Point 27
- Table 9 contains a summary of the asbestos monitoring (air) results during Remediation Project works only.
- Table 10 and Figure 5 provide an overview of the calls made to the 24-Hour Kurnell Community Hotline

**TABLE 7A – Licenced Monitoring/Discharge Points: 2023**

Monitoring Period	2023								
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	5.4	4.743	<0.001	<0.001	<0.003	<0.003
Highest	<0.001	<0.001	<0.001	7.9	5.884	<0.001	0.400	<0.11	<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	6.3	2.111	<0.001	0.390	<0.003	<0.003
Highest	<0.001	<0.001	<0.001	7.1	2.711	<0.001	4.330	<0.11	<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	2023								
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	6.9	0.407	<0.001	<0.12	<0.003	<0.003
Highest	<0.001	<0.001	<0.001	7.6	0.797	<0.001	1.500	<0.11	<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	<0.500	3.600	<0.001	6.1	2.306	2.000	29.80	<0.003	13.000
Highest	1.000	6.700	<0.001	7.0	2.867	3.000	71.20	0.161	26.000
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: 2022**

Monitoring Period	2022								
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	5.4	4.025	<0.001	<0.12	<0.11	<0.003
Highest	<0.001	<0.001	<0.001	6.4	7.709	<0.001	0.40	<0.11	<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	6.6	1.569	<0.001	1.60	<0.11	<0.003
Highest	<0.001	<0.001	<0.001	7.4	2.711	<0.001	3.18	<0.11	<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	2022								
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	7.4	0.383	<0.001	<0.12	<0.11	<0.003
Highest	<0.001	<0.001	<0.001	7.9	0.668	<0.001	0.30	<0.11	<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	0.900	4.900	<0.001	6.6	2.534	3.000	53.70	<0.11	19.000
Highest	3.200	14.000	<0.001	7.1	2.867	11.000	77.40	0.15	52.000
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/Discharge Points: 2021**

Monitoring Period	2022								
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	5.3	3.225	<0.001	<0.12	<0.05	<0.003
Highest	<0.001	<0.001	<0.001	5.7	4.485	<0.001	0.12	<0.11	<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	5.3	1.68	<0.001	0.08	<0.05	<0.003
Highest	<0.001	<0.001	<0.001	6.2	2.087	<0.001	1.70	<0.11	<0.003
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	2022								
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	6.2	0.347	<0.001	<0.10	<0.05	<0.003
Highest	<0.001	<0.001	<0.001	7.8	0.855	<0.001	1.10	<0.11	<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	1.800	6.600	<0.001	5.7	2.398	8.600	19.80	<0.05	28.000
Highest	4.000	9.400	<0.001	7.3	2.679	12.000	73.00	<0.11	34.000
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/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 7D – 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 7E – 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 7E – 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 7F – Licenced Monitoring Points: 2018**

Note: First Year of reporting Monitoring Points 28 and 29 (ASC CC Groundwater wells installed)

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 7F – 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

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.

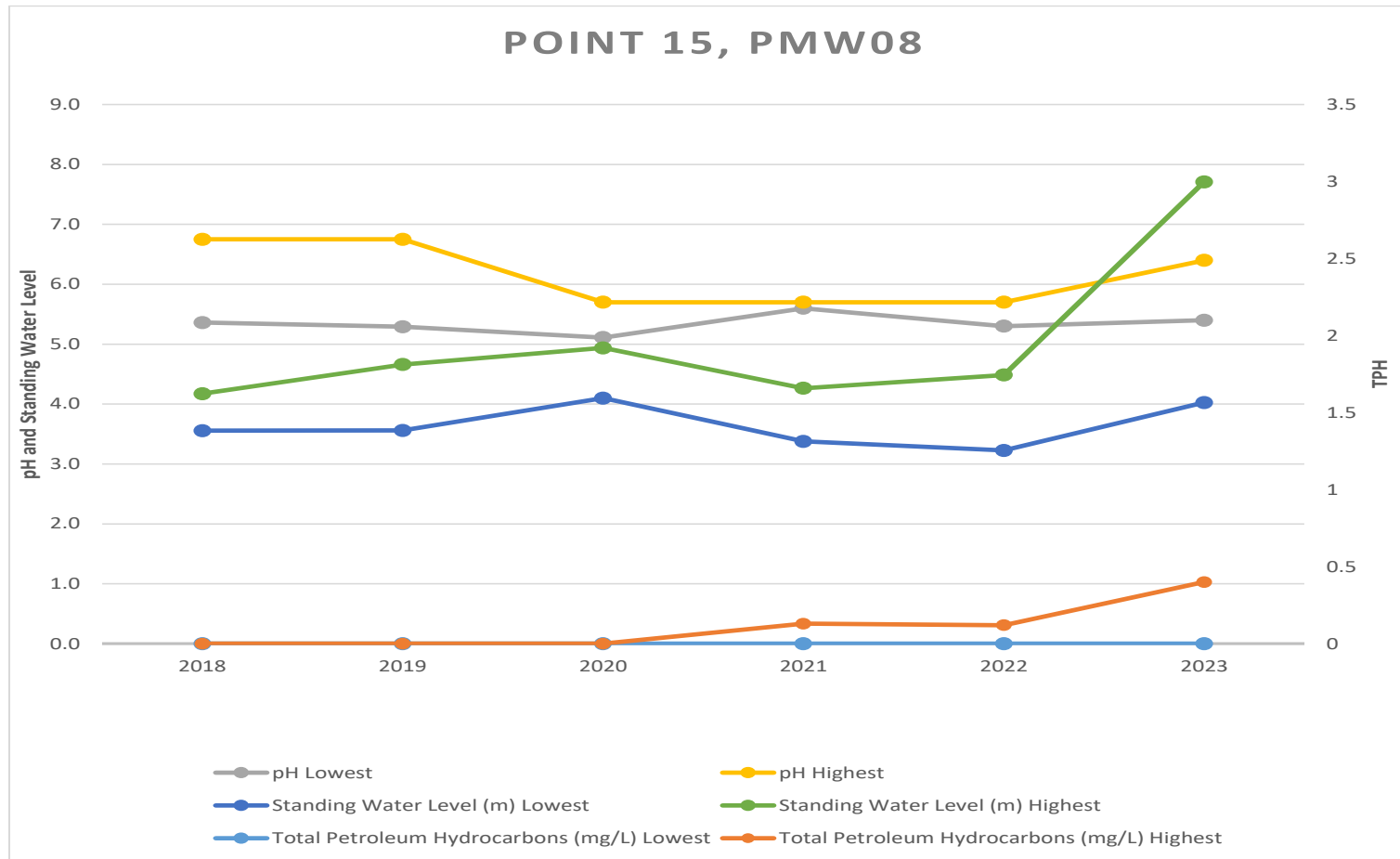


Figure 1. Monitoring Point 15 Data – 2018 to 2023



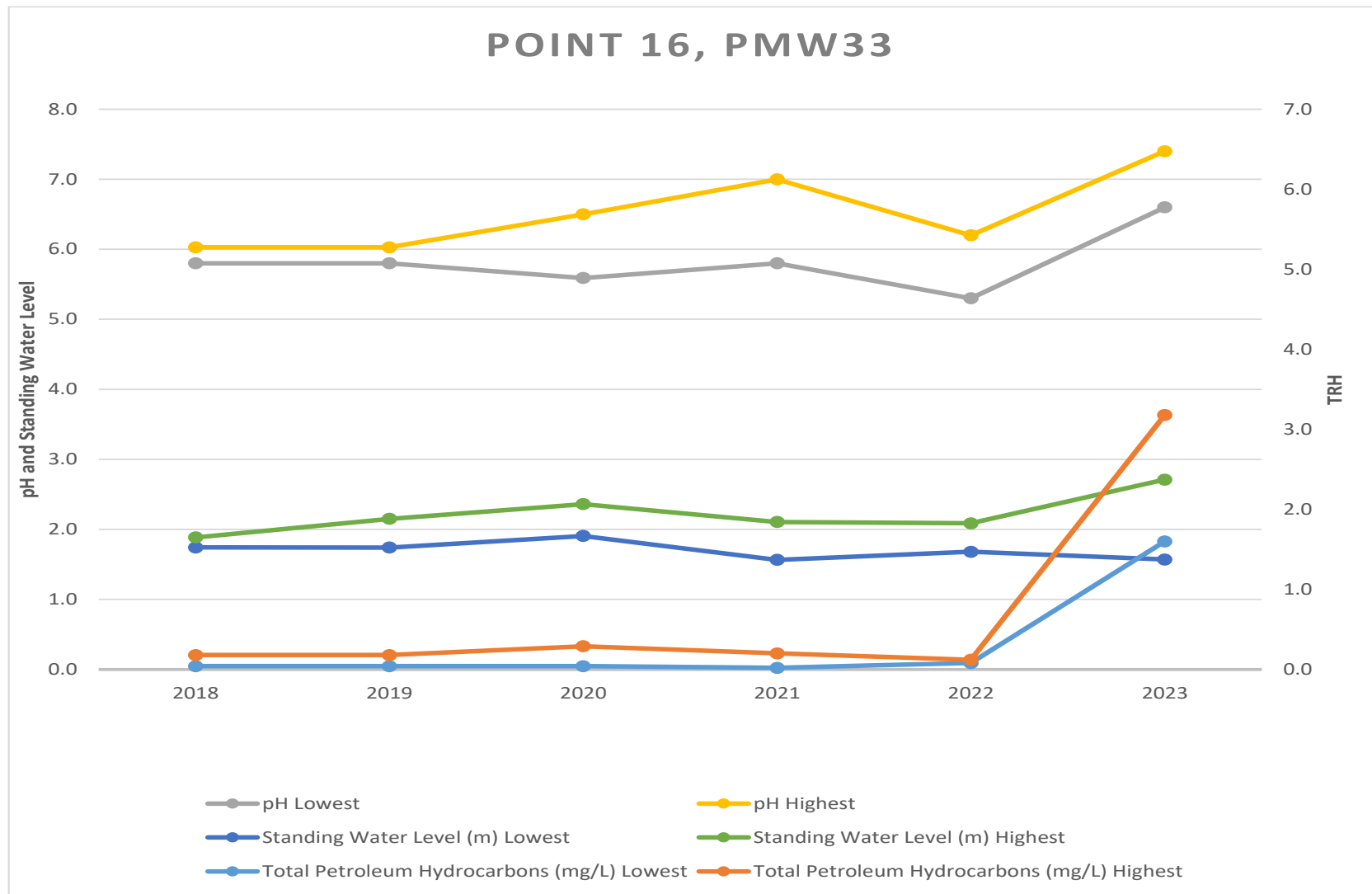


Figure 2. Monitoring Point 16 Data – 2018 to 2023

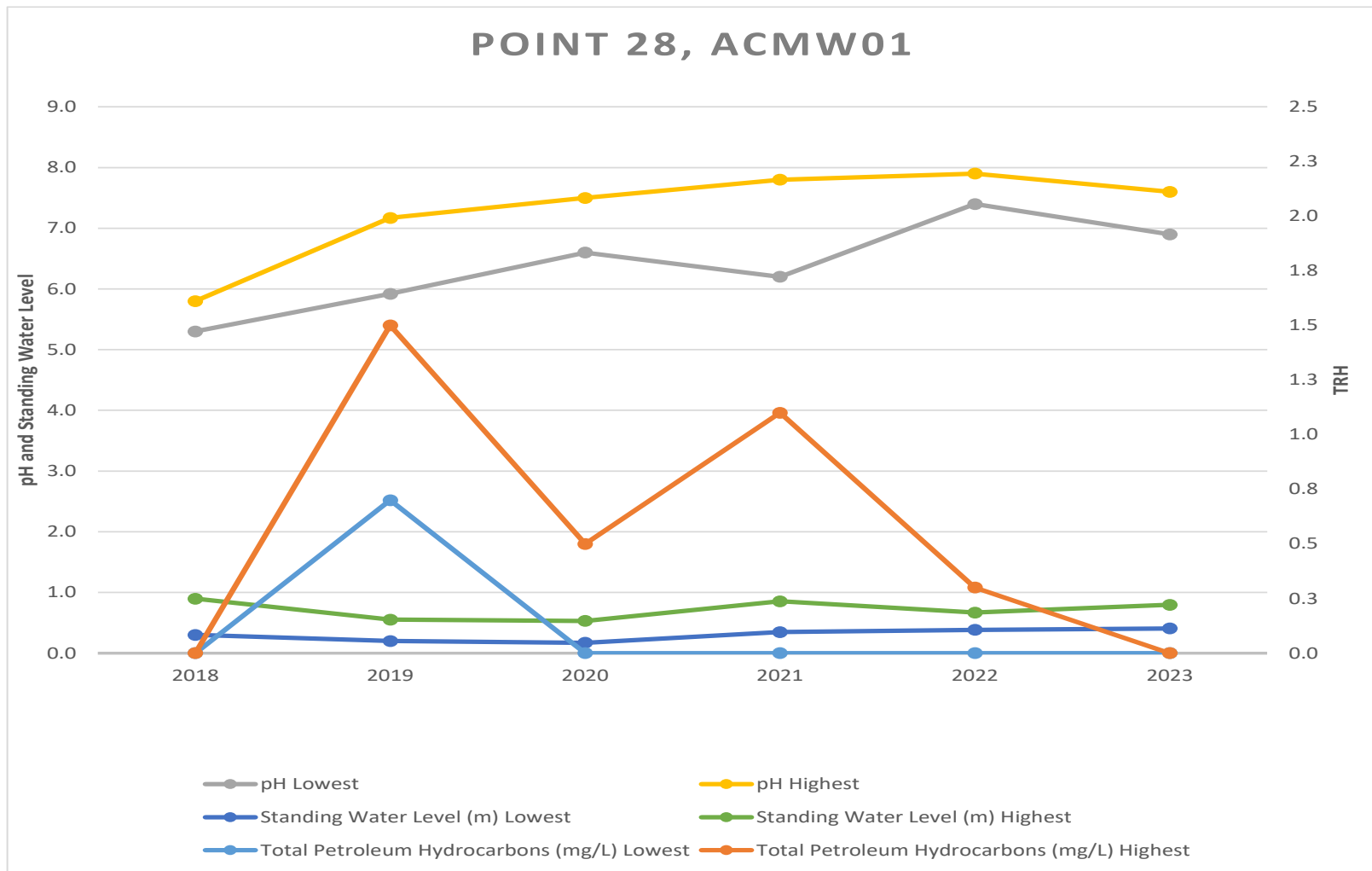


Figure 3. Monitoring Point 28 Data – 2018 to 2023

**Note:** Well ACMW01 was established in 2018 as part of the development of the asbestos containing soil containment cell.

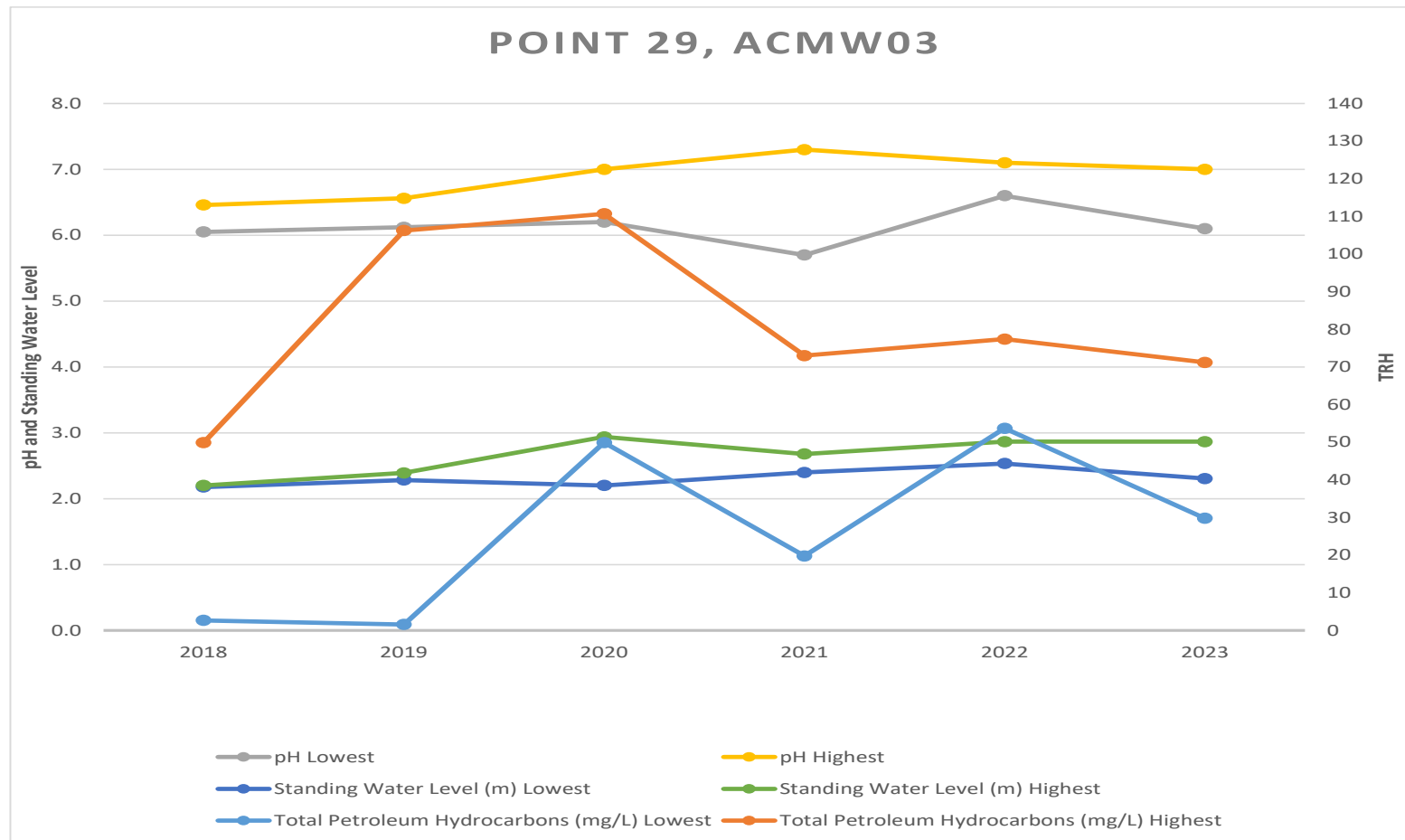


Figure 4. Monitoring Point 29 Data – 2018 to 2023

**Note:** Well ACMW03 was established in 2018 as part of the development of the Asbestos Contaminated Soil (ACS) Containment Cell.

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

Monitoring Period	2023									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	32	32	32	32	32	32	No Missing Data
Lowest	15.8	6.5	0	<5	<0.05	<0.1	<0.01	<1	<2	
Highest	27.1	8.3	27,389	8	0.08	<0.1	0.50	19	20	
Exceedance (yes/no)	No	No	N/A	No	No	N/A	No	No	No	

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

Monitoring Period	2023										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	11	11	11	11	11	11	11	11	11	11	No Missing Data
Lowest	<0.001	<0.002	<0.001	<0.0002	<0.001	<0.0002	<0.001	<0.002	<0.0002	<0.0002	
Highest	0.002	<0.005	<0.001	<0.0005	<0.001	<0.0005	0.287	1.16	<0.0002	0.0410	
Exceedance (yes/no)	No	N/A	No	N/A	No	N/A	N/A	N/A	No	N/A	

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

Monitoring Period	2023				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	60	60	60	60	Maintenance Bypass was used during the year whilst the Biotreater was offline.
Lowest	<5	<0.05	6	1	
Highest	8	0.35	9	21	
Exceedance (yes/no)	No	No	No	No	

**Table 9: 2023 Terminal Remediation Project Works - Asbestos Monitoring Results**

Location	No. of Samples Collected 2022 Period	NSW SafeWork >0.02 Fibres/millilitre of air sampled	NSW Depart Health & Ampol Action Level >0.01 Fibres/millilitre of air sampled
C-2 Slab/Compound 2	39	nil	nil
CLOR – Pipeway	4	nil	nil
Con Carb	46	nil	nil
Firehouse	9	nil	nil
Old LPG Loading area	38	nil	nil
Northern Process Unit area	4	nil	nil
Old Scrapyard	8	nil	nil
Old Substation near SEPS	38	nil	nil
OMC	52	nil	nil
Pipeway C	44	nil	nil
Pipe Track East/West	24	nil	nil
ROW	8	nil	nil
Separators area	20	nil	nil
T328, T353, T354, T330	4	nil	nil

T101, T102, T103, T104	6	nil	nil
Location	No. of Samples Collected 2022 Period	NSW SafeWork >0.02 Fibres/millilitre of air sampled	NSW Depart Health & Ampol Action Level >0.01 Fibres/millilitre of air sampled
T156, T146, T136, T126	3	nil	nil
T159	3	nil	nil
T166	3	nil	nil
T213, T216, T217, T218	3	nil	nil
T210, T211, T212	3	nil	nil
T202, T203	12	nil	nil
T325, T327	3	nil	nil
T415	4	nil	nil
T611, T613	6	nil	nil
T612	8	nil	nil
T01	27	nil	nil
T101	12	nil	nil
T18	4	nil	nil
Various Locations	2	nil	nil
Workshop	6	nil	nil
Waste Bays Scrapyard	20	nil	nil

**Notes:**

1. Air monitoring carried out by Consultant Occupational Hygienist during remediation project works involving excavation and removal of asbestos contaminated soils. All such works carried out by Class A licenced contractors.
2. Asbestos monitoring specific to the Remediation project areas will vary from year to year.

As can be seen from the range of monitoring data above, the site remains in compliance with EPL 837 set licence limits and the relevant SSD5544 consent conditions.

### 2.3.2 Terminal 24 Hour Kurnell Community Hotline Analysis

During the 2023 reporting period, the 24-Hour Kurnell Community Hotline received twenty eight (28) calls. The following Table shows the breakdown of these calls, based on the category of the complaint:

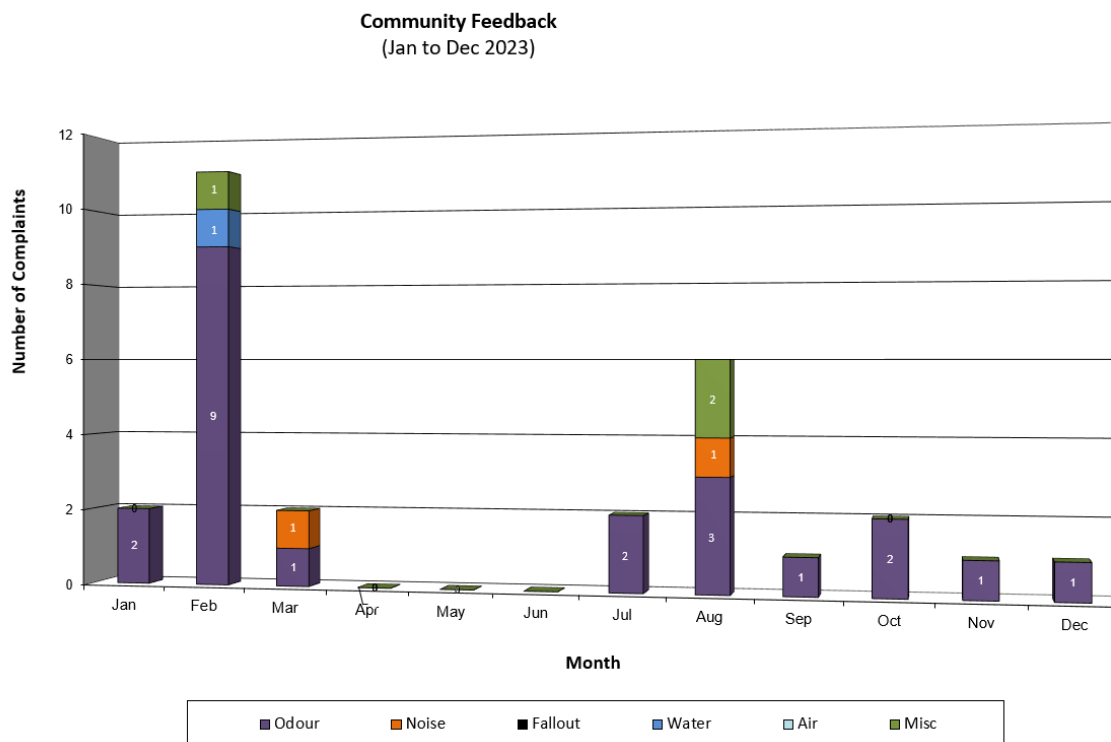
**Table 2.3 2023 Community Hotline Monitoring – Nature of Calls**

Number of Call Recorded During the Last Twelve Months	
Pollution Complaint Category	Number of Calls
Odour & Air	22
Water	1
Noise	2
Fallout & Waste	0
Miscellaneous	3
Total	28

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

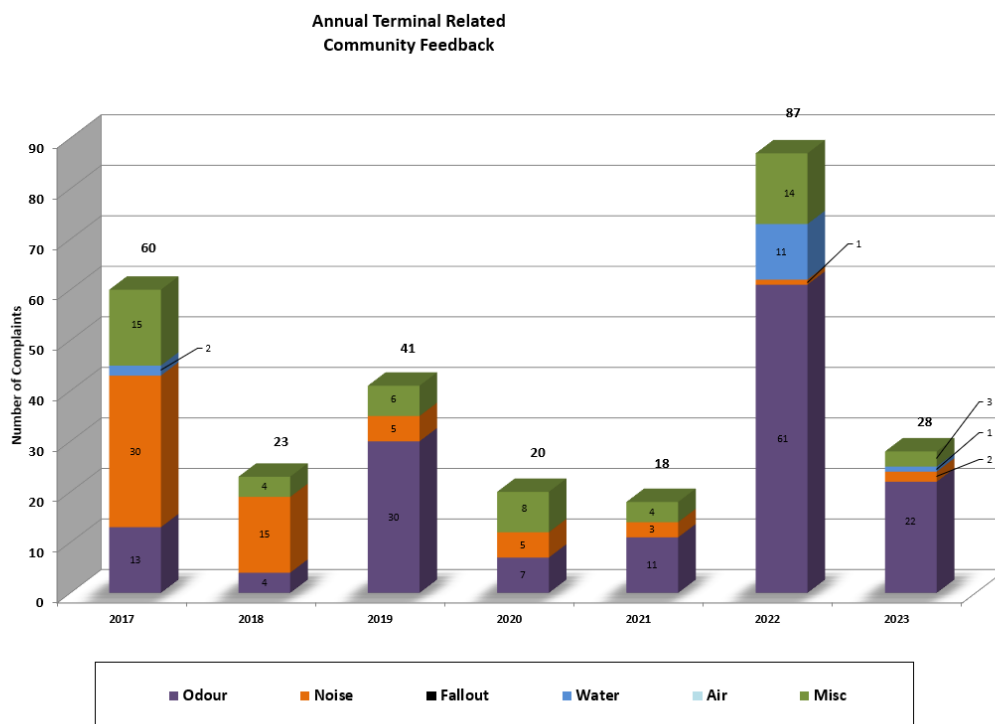
In line with the site's complaints and incident investigation procedures, such calls are followed up immediately with an 'in the field' investigation into the potential cause of the complaint and a discussion with the complainant to gather more details (if possible). All investigations are tracked in the Ampol LPS Database to completion of assigned actions, where required. The outcome of the investigation and the actions taken is provided either by a face-to-face meeting, or during a follow up phone call to the complainant. Figure 5 shows the breakdown of the community feedback/complaints by month over the reporting period.





**Figure 5 2023 Community Hotline Monitoring – By Month**

Figure 6 shows the year on year comparison (2017 to 2023) of the number and type of community feedback/complaints received.



**Figure 6 Annual Terminal Related Community Feedback/Complaints**

It is pleasing to report a significant reduction in the nature and number of community feedback/complaints in 2023, when compared to the 2022 spike in complaints following the Kurnell flood event on 7 April 2022, as shown in Figures 5 and 6 above.

Although the twenty two (22) calls/complaints regarding perceived odour represent a significant reduction when compared to the fifty nine (59) calls in 2022, they continue to be the main reason for calling the Kurnell Terminal Community Hotline. The community's main odour concerns related to:

- Twelve (12) hydrocarbon odour complaints from residents living near Gate 5 area of the site or near the northern Tank bunds. These types of odour complaints were generally received during periods of heavy rain and high southerly wind events and/or following Tank "water draw" tasks. Localised pooling of stormwater can lead to hydrocarbons to emerge from the oil-water sewer on site, leading to the emission of odours. This pooling of stormwater can occur across the site in bunded areas but is more prevalent in the northern area of the site.
- Eight (8) odour complaints were received from property owners living in and around Tasman St and Captain Cook Drive near the Kurnell Recreation Club. The wetlands area leading to Quibray Bay sits behind Tasman St and is known to be odorous during low tide and sustained dry spells.
- Two (2) hydrocarbon odour complaints relating to the Stormwater drain outlet located at the beach near the Wharf on ramp. This represents a reduction in the number of odour complaints and is directly related to the on-site stormwater system and oily water system project work carried out in 2022-23 period

All odour complaints received, either via the Ampol's 24-Hour Community Concerns Hotline or via other sources e.g. NSW EPA, were investigated in an effort to define the source of the odour and to take appropriate mitigating actions.

Refer to Section 2.4 for details of discussions with NSW EPA, the affected residents and the operational mitigation measures taken to address these odour complaints, as well as additional Pollution Studies and Reduction Programs and Special Conditions included in the Site's EPL (dated 9 Nov 2023).

While there were 5 ships reported to the NSW EPA for exceeding the night-time noise limit of 50 dBA (EPL 837 - Limit Condition L5), there were no community complaints made about shipping noise. The two (2) noise complaints made in 2023 related to plant/equipment used for a short period during project work in the terminal and wharf.

The number of miscellaneous enquires also reduced – thirteen (13) in 2022 and only three (3) in 2023. They related to weeds entering their property from the ROW, Tank 101 light annoying a nearby resident and a pool of "smelly water" in resident's backyard

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.

In line with the *Ampol Group Incident Notification and Investigations Standard* (CD3824), all complaints, any investigation into possible cause/s and all findings and actions are recorded in the Ampol Loss Prevention System (within Cintellate), as well as communicated to the complainant.

## 2.4 Terminal Environmental Non-Compliance And Corrective Actions

While there were continuing issues with perceived odour complaints (22) in 2023, based on the environmental monitoring data, the community complaints data and the five (5) tanker ships reported to exceed the night time noise limits (as presented in the previous section), there were no other non-compliances against any other SSD5544 conditions of consent, specific to the Terminal operations or EPL 837 limits or operating conditions.

A total of seventy eight (78) tanker ships were received at the Kurnell Terminal during the 2023 period. Five (5) tanker ships) was identified and reported as having exceeded the Kurnell Terminal EPL 837 night-time noise limits during the 2023 period, with nil shipping noise complaints received this year. This is an excellent result when compared against the total number of ships berthed in the 2023 period.

As per the Site's established process, these exceedance event was investigated and reported to the Ampol Marine Assurance and Vetting teams, in line with the agreed shipping performance process. NSW EPA were also notified via an agreed email proforma.

Sustained year-on-year shipping noise abatement improvements have been achieved since the commissioning of the SmartaData SoundScience Noise monitoring system in October 2018, that is 2019 (15 tanker ships), 2020 (12 tanker ships); 2021 (2 tanker ships), 2022 (3 tanker ships) and 5 tanker ships in 2023 . These results demonstrate the continued operational value of the shipping noise monitoring system in the early potential exceedences detection and correction and strict expectations on visiting tanker ships to employ noise controls measures to prevent ship exceedances against the Kurnell Terminal EPL 837 night-time noise limits.

### Note:

*NSW DPE (Laura Papoulias) confirmed in writing (12 September 2022) that the Department no longer require Ampol to notify them of tanker ship night-time noise level exceedences. Incident reporting under Approval SSD5353 (Berthing Upgrade), D8 does not appear to include limit exceedences, therefore there is no requirement to submit incident notifications/reports to the Department that relate to the site's berthing area nor include details of specific ship noise exceedence events and corrective/preventative actions taken by Kurnell Terminal Marine operations.*

#### 2.4.1 Perceived Odour Complaints:

As stated in the 2022 report, the Kurnell site has a long history of this type of complaint, more so during the operation of the refinery. While we are unable call up community complaint data from the earlier period of the refinery, such records have been collected since 1998.

On average, seventy (70) perceived odour complaints were received per year during the refinery period 1998 to September 2014. Interestingly, in the years associated with significant incidents impacting the community, the site experienced significant upswings in perceived odour complaints, for example 178 in 2006; 159 in 2010 and 59 in 2022, post the flood event in April.

By comparison, since the commencement of full Terminal operations in late 2014, there has been an average of twenty (20) perceived odour complaints per year during the terminal's operating period 2015-2023. Taking into account 2023, there has been an average of twenty (20) perceived odour complaints per year during this period, taking into account all complaints received following the separator overflow incident associated with the flooding of the site and surrounding areas.

A sustained effort continues to be made on odour control during "at risk" activities such as tank water draws and remediation works involving hydrocarbon soils, etc. during the 2023 period

The Terminal Operations Manager and the National Environment Manager, Distribution have worked closely with odour specialist consultants and the NSW EPA representative to investigate the potential contributing site aspects and work on an odour mitigation plan to ensure offensive odours do not leave the site.

Starting in mid-2021, we completed a review of the sewer system around the northern Tank bunds and completed the cleaning out of the drains in these bunds and associated cleaning of the sewer system pits outside these bunds. This ensured the sewer systems remained cleared and flowed efficiently to the site's Waste Water Treatment Plant. The assessment and cleaning program was extended to all drains and sewer pits on site during 2023 as well.

Particular attention had been given to investigating and characterising the observed source of potential hydrocarbon odours and sheens at the stormwater outlet adjacent to the wharf in the 2022 - 23 period. Follow up sampling and investigations at the stormwater drain adjacent to the wharf identified low concentrations of hydrocarbons at levels below relevant marine and health guidelines. The Operations and Environment teams have been working alongside the EPA and a Kurnell community working group to determine the best course of action, which as a first step, was the initiation of a detailed monitoring program. In addition, a detailed odour assessment has been conducted on site by an accredited consultant team, specialising in this area of environmental science. Continuing in 2023, Ampol has put the following mitigation measures in place:

- We continue to use an approved industrial deodoriser in and around the northern Tank bunds to suppress potential odours and other areas on site, as and when required.

- We are continuing regular odour surveys around our boundary to establish areas of potential concern. These surveys are being conducted during southerly wind events and after rain.
- Tank water draws are a necessary operational task but the Operations team endeavour, where possible, to undertake the task in optimum weather condition - dry and winds from the north.
- As part of our Tank maintenance and repair program, we reviewed the grading of Tank bund floors to ensure rainwater is not trapped within the bunds thus minimising the potential for odours to be generated.
- An updated oily water sewer system inspection program is now in place. This program ensures that the sewer systems around the Terminal are inspected at regular intervals and that silting up of the sewer drains and pits is minimised and thus does not have the potential to generate odours.

As a result of ongoing discussions between Ampol and the NSW EPA, a new Pollution Studies and Reduction Program titled **PRP U27: Stormwater Pipe Investigations and Rectifications** is aimed at driving further reduction in odours being generated from the site and has been included in the latest variation of the Site's EPL 837, specifically:

The objective of this program is to:

- I. complete stormwater pipe re-lining works in an attempt to reduce hydrocarbon concentrations in stormwater discharges and monitor the success of these works;
- II. assess feasible measures to remove the hydrocarbons from the stormwater discharges; and
- III. if necessary, undertake an assessment of further options to reduce hydrocarbons in stormwater discharge and any odours generated as a result.

In addition, the NSW EPA added another Special Condition (SC E18) titled **Waste Water Treatment Plant - Odour Reduction Program** to the Site's EPL 837, aimed at reducing the likelihood of odour generation from the separator pits. There were two requirements included in the SC, namely:

- install activated carbon filters to the tops of all exhaust pipes at the separators
- install a cover over pit MH72

The SC required the Site to have completed the works and provide the EPA with written confirmation that the work had been completed by 22 September 2023. It is pleasing to report that this SC was met.

## 2.4.2 Community Engagement

With the aim of keeping the affected community members, as well as the wider Kurnell community updated on the efforts made by Kurnell Operations and Engineering Projects, the Community Liaison Manager coordinated the following communications occurred during the year:

- Monthly community update distributed via a letterbox drop to all Kurnell residents providing updates on terminal operations, maintenance projects, community support and how to contact the terminal
- Established a [community@ampol.com.au](mailto:community@ampol.com.au) email address and 24/7 community hotline to make it easier for resident and stakeholders to contact the terminal
- Regularly face to face engagement with local residents and other key stakeholders (i.e. National Parks Wildlife Service, Transport for NSW – Kamay Ferry Wharves project
- Attended Kurnell Progress, Precinct and Residents Association meetings when available.
- Provide key information via social media when required
- Provide improved information and notice on works that might generate local interest or attention
- Established an Alert platform to provide residents (who opt in) and the wider community with initial alerts and information in the event of a major incident that has potential community impact (e.g. fire). Residents can opt to receive the notification via SMS, email or voice message.

*Note: Advice around evacuation and other actions remain the responsibility of emergency services and the community are advised to follow their directions at all times.*

The NSW EPA have been provided with copies of all community engagement letters. The Terminal Operation Manager and National Distribution Environment Manager remain in regular contact with the NSW EPA to report on the progress of the mitigation plan and to report any new odour complaints.

#### 2.4.3 April 2022 Flood Incident - Additional Measures taken by NSW EPA

As a reminder, on the evening of 6 April 2022 and in the early hours of 7 April 2022, an extreme weather event occurred in Kurnell. Heavy rainfall and other environmental factors led to floodwaters inundating the area of the Waste Water Treatment Plant (WWTP).

At approximately 12:06am on 7 April 2022, due to the WWTP being inundated with floodwaters, hydrocarbon present in components of the WWTP, including the Oily Water Separators, Wet Oil Sump, Oil Sump and Sludge Retention Basin, mixed with floodwaters and escaped via gaps in lids and coverings. The hydrocarbon-impacted floodwaters (estimated to be approximately 9,200 Litres overwhelmed bunding at the Premises, escaped the Premises' boundary and flowed to surrounding land, waters and residences.

As a result of the Incident, hydrocarbon-impacted floodwaters were introduced into Marton Park Wetland, two adjoining unnamed creeks, stormwater drains along Captain Cook Drive, a culvert and drain linking Marton Park Wetland and Quibray Bay (including the mangroves of Quibray Bay) (**the Waters**).

Ampol accepted full responsibility for all contributing factors to the incident that were within our control, and deeply regrets the impact the incident has had on the Kurnell community and the environment.

In response to the incident, we undertook extensive clean-up works to remediate the impacted lands and waterways.

In light of the 2022 Flood incident, Ampol and the EPA also recognise the possibility of continuing adverse weather events need to be considered with improvements in stormwater management on site imperative. Another detailed hydrologist study of the site was completed in 2022, the results of which allowed Ampol Engineering, Kurnell Operations and the National Environment Manager, Distribution to identify a series of upgrades to the stormwater management system at the premises, which they predicts will prevent a similar flood incident from reoccurring. These upgrades, which were presented to the EPA, are primarily designed to:

- Provide upstream retention of stormwater to mitigate the risk of overland flow and flooding of the waste water treatment plant; and
- Maintain segregation between stormwater and oily water systems at the waste water treatment plant.

As a result of ongoing discussions between Ampol and the NSW EPA, an additional Pollution Studies and Reduction Program titled **PRP U28: Stormwater Management System Upgrade** has also been included in the latest variation of the Site's EPL 837 to drive the identified improvements.

#### 2.4.3.1 NSW EPA - Enforceable Undertaking

Ampol acknowledges the 7 April 2022 flood incident resulted in hydrocarbon contaminated flood waters impacted the local community and surrounding environment. As a result of discussions between Ampol and the NSW EPA, under section 253A of the POEO Act, Ampol has given, and the EPA has accepted, the following (enforceable) undertakings in response to the flood incident.

The enforceable undertaking requires Ampol to pay \$700,000 to fund the following four projects:

- Project A: \$180,000 to Greater Sydney Landcare to provide an educational program, involving research and water sampling activities in the Kurnell area, to local school students.
- Project B: \$150,000 to National Parks & Wildlife Service to undertake a program to remove invasive weeds and restore native species in the Kamay Botany Bay National Park
- Project C: \$150,000 to Sutherland Shire Council for the construction of a new outdoor gym at Marton Park.

- Project D: \$220,000 to Sutherland Shire Council for the construction of a new children's playground at Marton Park.

#### 2.4.3.2 Quibray Bay Mangroves Cleanup Notice No: 3505381

Related to the April 2022 Flood incident but separate to the above-mentioned Enforceable Undertaking, new information was made available to the NSW EPA by a Georges Riverkeeper member and NSW Fisheries in relation to the health (observed dieback) of mangroves in Quibray Bay (adjacent to the Kurnell Terminal). It was already established that hydrocarbon-impacted floodwaters were introduced into this area via a drain linking Marton Park Wetland and Quibray Bay as a result of the flood incident.

The NSW EPA issued Ampol with Clean-up Notice (CUN) No: 3505381 on 16 August 2023 that directs Ampol to engage an independent and suitably qualified environmental consultant with expertise on mangrove management to undertake the following:

- a) Develop and implement a monitoring plan to ascertain the nature and extent of hydrocarbon contamination in the Mangrove Area impacted by the flood incident
- b) Carry out a detailed assessment the impact of the flood incident on mangrove health in the Mangrove Area.
- c) Based on the outcomes of the monitoring pan and assessment works, provide recommendations on clean up, monitoring, remedial and/or mitigation actions to remove hydrocarbon contamination caused by the pollution incident in the Mangrove Area and to remediate mangroves any areas within the Mangrove Area where mangrove health was impacted by the incident.

WSP, Environmental Consultants have been engaged to undertake the works with the NSW EPA approving the nominated WSP ecologist consultant specialising in mangrove health and management. There are a number of reporting requirements associated with the CUN.

The NSW EPA has approved the specialist WSP ecologist consultant to undertake the works and the necessary monitoring and assessment works has already started. The NSW EPA requires the consultant to prepare a report within the nominated period, detailing the following:

1. The results of the monitoring plan, as outlined above in a)
2. The results of the mangrove health assessment, as outlined above in b)
3. Recommendations regarding the clean-up, remedial and/or mitigation actions in the Mangrove Area as outlined above in c) (the Consultant Report)

#### 2.4.4 Event Reported to NSW Regulators

The unfortunate drowning of a Freyssinet work engaged in Wharf repair work on 6 November 2023 was reported to SafeWork NSW. The incident has been investigated by Ampol and SafeWork NSW with both reports provided to the NSW Coroner.



Neither NSW EPA or NSW DPE<sup>1</sup> were notified on this occasion as the event did not meet the reporting requirements defined in EPL 837 and SSD5544 D6.

There were no other incidents or non-compliance events pertaining to Terminal operations reported to NSW regulators in the 2023 period.

*Note<sup>1</sup>*

*D6 of SSD5544 require reporting to the DPE in cases where an incident has actual or potential significant off-site impacts on people, or the biophysical environment associated with the development.*

## 2.5 2023 Terminal Data Trend Analysis

As stated in the above section, there were five (5) tanker ship exceedances against the Kurnell Terminal EPL 837 night-time noise limits identified and reported to the DPE and EPA in 2023. Nil community noise complaints were made, despite the slightly increased number of reported ships against the 2022 data. As stated previously, seventy eight (78) tanker ships berthed at Kurnell in 2023 with a very small number of ship exceedances. This still represents a sustained improvement in terms of chartered tanker ships selection by Ampol Marine Assurance and surveillance of ships berthed at the Kurnell wharf by the Ampol Shore Officers since the SoundScience Noise Monitoring System was commissioned.

Although odour complaints formed the majority of community feedback/complaints in 2023, there was a noticeable decrease in odour complaints (22) during 2023 against fifty eight (58) in 2022. This improvement is associated with odour reduction works on site and a sustained engagement of the Kurnell community. The engineering works associated with the stormwater system on site and the stormwater discharge drain next to the wharf on-ramp has resulted in less community feedback/complaints associated with odour and stormwater quality – eleven (11) in 2022 and only one (1) in 2023.

The ongoing impact of the hydrocarbon contamination arising from the 2022 Flood incident is evident with reported Mangrove dieback in Quibray Bay. This finding is now the subject of a new CUN issued on 16 August 2023 by NSW EPA. Specialist (WPS) ecological monitoring and assessment works will continue in 2024 with a report detailing the results of the monitoring plan, mangrove health assessment and recommendations regarding the clean-up, remedial and/or mitigation actions in the Mangrove Area issued to the regulator in the start of the second quarter.

No other non-compliance events pertaining to Terminal operations were reported in the 2023 period.

Analysis of the available data show continued sound operation of the Terminal within licence and SSD5544 consent requirements, other than continued odour complaints and the Mangrove dieback. Leaving aside the continued reporting of odour complaints and the current CUN, the EPL compliance and monitoring data does not reveal a trend that could potentially lead to non-compliance with any other licence and/or Terminal operations specific consent conditions.

## 2.6 Terminal Data Discrepancies (Predicted versus Actual Environmental Impacts)

The Terminal Environmental Management System (EMS) used to manage and monitor the potential environmental aspects and impacts associated with the development is considered to be mature and adequate to account for the various 'interested party' needs – as indicated by the comments made in the ISO auditor reports and environmental performance reporting in the NSW EPA Annual Return.

Despite the earlier restrictions imposed by COVID 19, the engagement of a dedicated Community Liaison Manager has lead to a sustained improvement in communications and Kurnell community engagement efforts via letterbox drops (where needed) and monthly Community Newsletters, the Kurnell Community Facebook and continuation of the Community Working Groups formed post the 2022 Flood incident – refer to page 45 of this report for details.

The environmental stewardship processes embedded under the Ampol OEMS Element 13: Environmental Management ensured that relevant monitoring data is generated, assessed and reported, in accordance with D9 of SSD5544 and EPL 837. This also allows for any potential gaps to be identified early with corrective and preventative action plans developed and implemented.

The following Table provided a summary of the comparative assessment of the actual operational environmental impacts against the predicted environmental impacts of the development, as described in the Conversion Project Environmental Impact Assessment (EIS) Main Report – Parts 1 and 2.

**Table 2.4 Predicted Potential versus Actual Environmental Impacts Associated with the Development**

**Source: Caltex Kurnell Refinery Conversion Environmental Impact Assessment (EIS) Main Report - Parts 1 and 2 (URS)**

Predicted /Potential Environmental Impacts	Aspects	Actual Impacts (2014-2023 period) Monitoring Programs Compliance/ Incidents/Other
<b>Soil and Groundwater</b>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>Disturbance of contaminated lands or groundwater</li> <li>Spills/losses from construction equipment</li> <li>Loss to ground and groundwater during tank cleanout/demolition</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>Disturbance of contaminated lands or groundwater</li> <li>Oily water System overflow</li> <li>Spills/losses from maintenance equipment/works</li> <li>Pipeline (above/below) integrity/losses during tank to tank transfers</li> <li>Tank - water draws</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p>Nil GME non-compliances – refer to Table 7A-F for EPL Monitoring Points 15, 16, 28 &amp; 29</p> <p>Drowning of a Freyssinet work engaged in Wharf repair work on 6 November 2023 was reported to SafeWork NSW. The incident has been investigated by Ampol and SafeWork NSW with both reports provided to the NSW Coroner.</p> <p>Quibray Bay Mangrove Dieback reported by Georges Riverkeeper member and NSW Fisheries – NSW EPA CUN 30505381 issued on 16 August 2023</p>
<b>Human Health &amp; Ecological Risk</b>	<p>All Development Stages:</p> <ul style="list-style-type: none"> <li>Flora and Fauna</li> <li>Surface waters -Marton Park Wetlands shallow water bodies and swamy areas</li> <li>Contaminants of Potential Concern impacting soils (TPH, BTEX, PAH, Phenols, Lead, Asbestos)</li> <li>Groundwater impacts</li> <li>Air quality (VOCs, dusts, H2S, NOx, CO2)</li> </ul>	<ul style="list-style-type: none"> <li>Amпол owned wetlands protected</li> <li>Pipeway -asbestos impacted soils removed</li> <li>Ongoing remediation works to assess/quantify/collect and remove COPC from site = reduced potential worker and community exposure</li> <li>Improved air quality from refinery closure/cleanout/removal</li> <li>Improved Terminal Tanks (Sleeve installation program) infrastructure</li> </ul> <p>Quibray Bay Mangrove Dieback reported by Georges Riverkeeper member and NSW Fisheries – NSW EPA CUN: 30505381 issued on 16 August 2023</p>

<p><b>Surface Water and Wastewater</b></p>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>Disturbance of contaminated lands or groundwater</li> <li>Spills/losses from construction equipment</li> <li>Loss to ground and groundwater during tank cleanout/demolition</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>Disturbance of contaminated lands or groundwater</li> <li>Oily water System overflow</li> <li>Spills/losses from maintenance equipment/works</li> <li>Pipeline (above/below) integrity/losses during tank to tank transfers</li> <li>WWTP poor operational performance</li> <li>Potential flooding from stormwater (National Park) ingress to site – overwhelm WWTP, etc.</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p><u>Operations:</u> 100% WWTP performance against EPL837 requirements – refer to Table 8 for <i>Monitoring Point 27</i></p> <p>Nil Monitoring non-compliances or incidents reported to EPA , DOH and DPE</p> <p>Refer to Section 2.4 for details of Ampol’s continued remediation program.</p> <p>Refer to discussion on page 47 for CUN:30505381 details</p>
<p><b>Noise and Vibration</b></p> <p><i>(Potential impacts on community based sensitive receptors)</i></p>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>Compressor and generator use for pneumatic power equipment</li> <li>Excavator related works</li> <li>Truck movements off site during demolition works (scrape and other waste removal)</li> <li>Traffic noise associated with on/off site movements (deliveries; cranes/other mobile equipment; worker cars)</li> <li>Installation of new plant and tank refurbishments</li> <li>Felling of large refinery structures</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>Berthed Tanker Ships ( engine room equipment and discharge pumps) -principle source of community noise complaints and EPL night-time noise limits non-compliance</li> <li>Process operations plant (product and slops pumps; Diesel Additive Injection System; dosing pumps; compressors, fire pump testing; etc.)</li> <li>Maintenance tasks using power equipment</li> <li>Reduced traffic noise associated with on/off site movements (deliveries; cranes/other mobile equipment; worker cars)</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p><u>Operations:</u> Nil non-compliance against construction noise limits Reduced number of ship related night-time noise limit exceedences over life of the project reporting period (to date) with significant improvement post commissioning of wharf based predictive noise monitoring system. Only 5 tanker ships exceeded the night-time noise limit with nil community complaints</p> <p>Reduced traffic movts into and through community following to completion of the conversion/demolition phases of the development.</p> <p>Completion of soil remediation works along and around the affected area of Captain Cook Drive, Kurnell associated wit the April 2022 Flood incident</p>

<b>Air Quality and Odour</b>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>• VOCs – tank draining and cleaning; painting</li> <li>• Storage Tank emissions during storage and transfers</li> <li>• Particulate/ (dust) generating works – cutting; grinding; excavation works; truck movements during dry weather;</li> <li>• Combustion emissions- portable equipment</li> <li>• disturbance of asbestos impacted soils</li> <li>• Odour generation – tank draining and cleaning; disturbance of hydrocarbon impacts soils; WWTP- fuel slops, separator pits</li> </ul> <p><b>Operations (potential emission sources &amp;/or odours):</b></p> <ul style="list-style-type: none"> <li>• Storage Tanks – fugitive during storage and water draws</li> <li>• Product transfers – fugitive emissions during transfers</li> <li>• Oily Water system venting</li> <li>• Land Farm emissions during remediation/closure works (VOCs)</li> <li>• Combustion of ship fuels during shipping activities</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p><u>Operations:</u> Monitoring Programs – nil non-compliances</p> <p>Significance improvement in air quality post the end of demolition works – reduced number of truck movements on site (dust generation, etc) Land Farm closure and remediation works well advanced with significant reduction in potential odour generation from that area of the site.</p> <p>Installation of Tanks Sleeves well advanced – commitments to NSW EPA remain on track.</p> <p>Continued incidence of odour complaints but significant reduction (ave. 15/year) when compared to Refinery (ave. 70/year) since start of recordkeeping in 1998). Refer to Section 2.4.1 of this report for the Site's <i>Odour Reduction and Mitigation Strategy</i> discussions</p>
<b>Greenhouse Gases (GHG)</b>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>• <u>GHG Scope 1</u> generated from combustion of fuels in construction equipment (compressors, cranes trucks, etc)</li> <li>• <u>GHG Scope 2</u> – deemed negligible, associated with office electricity use</li> <li>• <u>GHG Scope 3</u> – construction materials (steel, concrete)</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>• <u>GHG Scope 1</u> generated from combustion of fuels in operational equipment (compressors, diesel pumps, trucks, excavators, etc.)</li> <li>• <u>GHG Scope 2</u> – deemed negligible, associated with office electricity use</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p>Significantly reduced against refinery GHG profile</p>

<b>Transport and Access</b>	<p><b>Conversion and Demolition:</b></p> <ul style="list-style-type: none"> <li>Increased construction vehicle movements - 10 vehicle movts per day</li> <li>Equipment and material deliveries- 10 vehicle movts per day</li> <li>Additional construction worker numbers (approx. 140)</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>Reduced no. operations employees and support functions</li> <li>Reduced maintenance team</li> <li>Periodic increases of maintenance team during Tank T&amp;I works (short time frames of 8-12 wks.)</li> <li>Reduced range of construction type vehicles and movts along Captain Cook Drive</li> </ul>	<p>Not Applicable – Conversion phase concluded 31 March 2020</p> <p><u>Operations:</u></p> <p>Sustained reduction in traffic numbers and movts. over the life of the project</p> <p>Ave 40 Ampol employees and regular maintenance workers per day</p> <p>Flexible working arrangements (days at home and in office) in place for non-shift personnel post COVID 19</p>
<b>Waste Management</b>	<p><b>Conversion and Demolition (waste streams):</b></p> <ul style="list-style-type: none"> <li>Excavated soils – hydrocarbon contaminated; asbestos contaminated, non- contaminated</li> <li>Metals – surplus from installations, demolished infrastructure, piping; etc.</li> <li>Concrete – contaminated and non- contaminated</li> <li>Excavated road base/asphalt – contaminated and clean</li> <li>Dewatered groundwater - hydrocarbon contaminated; non-contaminated</li> <li>Used absorbents, oily rags and PPE</li> <li>General solid wastes – paper/cardboard and putrescible</li> </ul> <p><b>Operations:</b></p> <ul style="list-style-type: none"> <li>Excavated soils – hydrocarbon contaminated; asbestos contaminated, non- contaminated (remediation related)</li> <li>Fuel oils and slops</li> <li>Garnet grit (Tank surface cleaning)</li> <li>Used absorbents, oily rags and PPE</li> <li>Dewatered groundwater - hydrocarbon contaminated; non-contaminated</li> <li>General solid wastes – paper/cardboard and putrescible</li> </ul>	<p>Nil</p> <p><u>Operations:</u></p> <p>Nil non-compliances for waste storage, tracking and records (assessed via internal audit program and ISO audit sampling)</p> <p>Only approved waste transporters and facilities selected with <i>due diligence</i> assessments completed prior to selection</p> <p>Paper/cardboard and ink cartridge recycling program in place</p> <p>Reduction in waste streams and volumes of waste generated with cessation of refinery operations.</p>

## **PART 3 – 2023 TERMINAL ENVIRONMENTAL IMPROVEMENT PLAN OUTCOMES AND PLANS FOR 2024**

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 and ongoing remediation program works. An overview of the improvement works planned for 2023 will be provided as well.

### **3.1 CHANGES MADE TO ENHANCE THE ENVIRONMENTAL PERFORMANCE OF TERMINAL ACTIVITIES in 2023**

#### **3.1.1 Implementation of the Tank Sleeve Program – SC E17 (previously PRP U16.2)**

In line with specific requirements of *Pollution Studies And Reduction Programs (PRPS)* defined in the EPL, 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 was completed and reported on in the 2015 Summary Report, Part 2 was also completed and reported on in the 2017 Summary Report, and Part 3 was reported on in the 2020 Summary Report.

The program has been converted to a Special Condition SC E17 with the title of Tank Turnaround and Inspection Program. The Special Condition requires annual reporting on progress of installing the emission reduction devices on the remaining three (3) Tanks, in line with agreed timeline. The first of these last three tanks (T408) is currently 'out of service', ready for installation of emission reducing sleeves in early 2023.

A progress report was issued to the NSW EPA in October 2022.

#### **3.1.2 Kurnell Terminal Odour Reduction and Mitigation Strategy**

The odour mitigation plan developed in 2021 was carried into 2022 and then 2023. In summary, it included the following measures:

- Continued use of industrial deodoriser in and around the northern Tank bunds to suppress potential odours
- Completion of regular odour surveys around our boundary to establish areas of potential concern. These surveys were conducted during southerly wind events and after rain
- While Tank water draws are a necessary operational task, the Operations team endeavoured, where possible, to undertake the task in optimum weather condition – dry with winds from the north
- As part of our Tank maintenance and repair program, we reviewed Tank bund floors to ensure rainwater was not trapped within the bunds thus minimising the potential for odours to be generated

- Applied the updated sewer system inspection program. This program ensures that the sewer systems around the Terminal are inspected at regular intervals and that silting up of the sewer drains and pits is minimised thus significantly reducing the potential to generate odours. The assessment and cleaning program was extended to all drains and sewer pits on site during 2022
- The Terminal Operations Manager and the National Environment Manager, Distribution have worked closely with odour specialist consultants and the NSW EPA representative to investigate the potential contributing site aspects and work on a mitigation plan to ensure offensive odours do not leave the site
- As stated previously, particular attention has been given to investigating and characterising the observed source of potential hydrocarbon odours and sheens at the stormwater outlet adjacent to the wharf. This has been followed up with sampling and investigations at the stormwater drain adjacent to the wharf and identified low concentrations of hydrocarbons at levels below relevant marine and health guidelines
- Following on from the flood event, we have been working alongside the EPA and a community working group to determine the best course of action, which as a first step, was the initiation of a detailed monitoring program. In addition, a detailed odour assessment has been conducted on site by an accredited consultant team, specialising in this area of environmental science.
- Continued communications and consultation with the affected community members, as well as the wider Kurnell community by providing updated on the efforts made.

The additional Pollution Studies and Reduction Program (PRP U27) and Special Condition (SC E18) included in the Site's EPL (latest dated 9 Nov 2023), will complement the mitigation measures already taken and support a sustained reduction in perceived odour complaints. The Terminal Operation Manager and National Environment Manager, Distribution remains in regular contact with the NSW EPA to report on the progress of the odour mitigation measures in the EPL and to report any new odour complaints.

### **3.1.3 EPL 837 - SC E16 Kurnell Terminal Remediation Action Strategy**

Whilst not within the scope of the SSD5544 Approval, in line with the NSW Contaminated Sites legislation and EPA expectations, a Kurnell Terminal Remediation Action Strategy (RAS) for the Site was prepared, ready for commencement at the end of the demolition works in 2020.

Certain remediation projects have required Sutherland Shire Council development consent to progress 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 EMS 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 Refinery Land / 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 approved waste facilities in Victoria and Queensland, in accordance with National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998 (NEPM). It is expected that this area of the site will be successfully remediated by end 2024.

A number of Development Consent/Approvals (DA) have been issued by Sutherland Shire Council (SSC) and remain active for the following areas of the site:

- DA20/0104 – CLOR Landfarm
- DA21/0002 – Continental Carbon Pipe Line

## **3.2 PLANNED IMPROVEMENT MEASURES FOR 2024**

### **3.2.1 Continued Implementation of the Tank Sleeve Program – SC E17 (previously PRP U16.2)**

In line the Tank T&I program, installation of the emission reducing sleeve on Tank 409.

### **3.2.2 Kurnell Terminal Odour Reduction and Mitigation Strategy**

Given the number of perceived odour complaints in 2022 and continuing in 2023, we will continue our focus on the key elements of the Odour Mitigation Plan - sewer system inspection program, as part of the site's maintenance program, odour surveys, etc.

Additionally, the implementation of agreed actions arising from the 2023 odour and stormwater quality assessment of stormwater outlet adjacent to the wharf. Further assessment are planned for 2024 in association with the requirements set out in a number of Pollution Studies and Reduction Programs (PSRP) and Special Conditions (SC), such as:

#### 3.2.2.1 PRP U27: Stormwater Pipe Investigations and Rectifications

Continuance of the activities set out in PRP U27, in line with NSW EPA requirements and the odour mitigation plan.

#### 3.2.3 PRP U28: Stormwater Management System Upgrade

Continuance of the activities set out in PRP U28, in line with NSW EPA requirements.

#### 3.2.4 SC E16 Kurnell Terminal Remediation Action Plan Strategy

Continuance of the RAS, in line with NSW EPA SC E16 reporting requirements, SSC DA requirements and the REMP.

#### 3.2.5 CUN: 3505381- Quibray Bay Mangroves Ecological Assessment Works

WSP continuance of the monitoring plan established this year and carry out the detailed assessment of the impacts on mangrove health from the pollution incident and provide recommendations on clean up, monitoring, remedial and/or mitigation actions to remove hydrocarbon contamination from the affected area.

#### 3.2.6 Ongoing Wharf Cathodic Protection Program

Continuance of the activities set out in Project Plan.

## 4 SUMMARY

Over the previous year, the Terminal and its program of works, Tank T&Is, existing and new Pollution Studies and Reduction Programs and Special Conditions have complied with the environmental obligations set out in ELP 837 and SSD 5544.

The ongoing maintenance and monitoring program (groundwater, leachate system, leak detection and erosion/sediment) associated with the ASC Containment Cell LTEMP 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 implemented – as evidenced by the latest ISO14001:2015 Recertification Audit outcomes. Attention to environment due diligence and the mature environmental management system in place will be continued as part of Terminal operations (land and wharf).

## APPENDIX 1.

### STATUS OF ACTIONS ARISING FROM THE [2021 INDEPENDENT ENVIRONMENTAL AUDIT \(IEA\)](#) – covering SSD5544 Conversion of Refinery to Import and Distribution Terminal (including MOD 1 – 6 Demolition Works)

Non-Compliance	Auditor Recommendation (Options)	Ampol Response
<p><b>1. Site Emergency Response Plan (ERP)</b></p> <p>Ampol was unable to provide evidence that the updated ERP (referring to Tank demolition works) was submitted to the NSW DPE, as required by MOD3 - Tank 101 Demolition</p> <p><b><i>Applicable Consent Condition: C4B</i></b></p> <p><u>Mitigating Evidence</u></p> <p>Documents were presented to show that the Kurnell Emergency Response Plan (CD2037) was reviewed and updated in January 2018 and that Pre-Fire Tank Plans and ERP Scenario Guidance Note -Tank Fire exists. These documents confirms that Ampol had the capability to response to a tank fire, particularly one associated with an emptied/cleaned tank. IDS (Demolition specialist) also prepared a Demolition Plan for Tanks 101 that included mitigation measures to prevent fire occurrence during demolition works and emergency response.</p> <p>Specific to Tank 101, an AECOM letter sent to DPE (dated 03/10/2017) was produced to confirm that Tank 101 had been emptied, isolated from all energy sources, opened (access lids), cleaned and vented for several months in preparation for demolition. In addition, residual testing confirmed nil hydrocarbons present.</p>	<p>Sighted subsequent approvals and associated communications between Ampol and DPE</p> <p>Noted that other Reports and Plans sampled (including sub-plans) have been submitted and approved within required timeframes. Better diligence demonstrated across the consent condition requirements with key evidence retained in Project files under specific consent conditions. Cintellate used for action sign off.</p> <p>Continue adherence to sound records management for all Project documents and submissions to third parties, (plans, reports, etc.) by ensuring:</p> <ul style="list-style-type: none"> <li>a) future Project leads and team members are inducted to the records management requirements for all Project documents, plans, reports and their submission to third parties, etc., as needed</li> <li>b) Action sign off/verification includes a check for correct record retention and evidence of submissions made (as required)</li> </ul>	<p>While Ampol accepted the audit team's findings and comments and recommendations, significant work and oversight has gone into improving and sustaining adherence to sound records management for all Project documents and submissions to third parties, (plans, reports, etc.).</p> <p>There were a number of reporting commitments to DPE and EPA during the period 4<sup>th</sup> Qtr. 2017 to March 2020 (when the project concluded) and this single event should be considered as an "outlier".</p> <p>Agreed we will use this NC as a "shared learning" opportunity to reinforce the important of sound records management practices for all project works and reporting commitments to third parties, such as regulators.</p> <p><a href="#">2023 Update:</a></p> <p>The outcomes of the 2021 IEA audit and the recommendations were communicated to all Fuels and Infrastructure groups after the IEA audit report was issued.</p>

## STATUS OF ACTIONS ARISING FROM THE [2017 INDEPENDENT ENVIRONMENTAL AUDIT \(IEA\)](#)

### SSD5544 Conversion of Refinery to Import and Distribution Terminal (including MOD 1 – Demolition Works)

Non-Compliance	Auditor Recommendation (Options)	Ampol Response
<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 proactive approach to internally recording odours before they become potentially offensive to neighbours.</p>	<p>Ampol (previously 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><a href="#">2023 Update:</a></p> <p>Odour remains an issue for the site. Please refer to Section 2.4, for 2023 odour complaints data and Sections 3.1 and 3.2 for project works relating to odour control and mitigation measures.</p>

Non-Compliance	Auditor Recommendation (Options)	Ampol Response
<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 DPE (Annual Review Report December 2016).</p>	<p>Loss Prevention investigations and subsequent actions were satisfactory.</p>	<p>Ampol (previously 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><b>2023 Update:</b> Nil incidents relating to pipeline or PSV’s in 2023.</p>
<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:</p> <p>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 DPE</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, DPE 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 were tracked in the Caltex action tracking system to demonstrate compliance.</p>

## STATUS OF THE CALTEX ACTIONS ARISING FROM THE [2016 INDEPENDENT ENVIRONMENTAL AUDIT \(IEA\)](#)

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

Non-Compliance	Caltex Response (Summary)	Status	2017 IEA – Auditor Review of 2016 Actions
<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><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><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><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 DPE 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>

## 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	2022 Comments/Actions (where required)  <i>Note: 2021 IEA comments left in for context</i>
	<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>2021 IEA</b>  Auditor noted NIL breaches
	<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	<b>2021 IEA</b>  One (1) consent condition non-compliant against C4B - Site Emergency Response Plan (ERP)  Refer to Appendix 1 findings
B3	If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However,	G	Statement	Compliant	Not triggered



	the conditions of this Consent shall prevail to the extent of any inconsistency.				
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	<b>2021 IEA</b>  Auditor noted NIL breaches
B5	Subject to confidentiality, the Applicant shall make all documents required under this consent available for public inspection on request.	G	Statement	Compliant	<b>2021 IEA</b>  Auditor noted Ampol Public webpage up to date
<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	<b>2023 ISO Recertification Audit:</b>  Auditor noted NIL breaches against max Volume limits  <b>2021 IEA</b>  Auditor noted NIL breaches against max Volume limits
B7	The construction works associated with the Development shall not extend beyond five (5) years from the date of approval.	G	Completed	Compliant	<b>2021 Update:</b>  Demolition phase of the conversion ceased on 31 March 2020, in line with additional end date extensions
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

	LAPSING OF CONSENT				
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
	SURRENDER OF EXISTING DEVELOPMENT CONSENTS				
B9	Within six (6) months of ceasing refining operations, or as otherwise agreed in writing by the Secretary, the Applicant shall surrender all existing development consents for the site listed in Appendix B in accordance with Clause 97 of the EP&A Regulation.	C	Completed	Previously assessed in 2016 and 2017 IEA as Compliant	<b>2023 Comment:</b>  Not triggered  Nil additional DA to surrender
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	The relevant regulatory approval requirement has previously been met and assessed as 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	
	STATUTORY REQUIREMENTS				
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>2023 Comment</b>  Ongoing compliance verified during 2023 ISO Recertification Audit

	<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	<a href="#">2023 Update:</a>  Not triggered- nil demolition works
	<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 as compliant	<a href="#">2023 Update:</a>  Not triggered  Nil new buildings or structure
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	NOTE: All demolition works (structures) completed mid 2019
	<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	<a href="#">2023 Comment</a>  Ongoing compliance to PM program assessed and verified during 2023 ISO Recertification Audit
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 2020 Update:</b>  Refer to MOD5 comments

	PROTECTION OF PUBLIC INFRASTRUCTURE				
B17	<p>Prior to the commencement of construction, the Applicant shall:</p> <p>(a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and</p> <p>(b) submit a copy of this report to the Secretary and Council.</p>	C	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	<p><b>2021 IEA</b></p> <p>Auditor noted NIL breaches</p>
B17 A	<p>Prior to the commencement of <u>demolition</u> works, the Applicant shall:</p> <p>(a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and</p> <p>(b) submit a copy of this report to the Secretary and Council.</p>	D/T	Completed	<p>Compliant</p> <p>Assessed in 2017 IEA</p>	<p><b>2021 IEA</b></p> <p>Auditor noted NIL breaches</p>
B18	<p>The Applicant shall:</p> <p>(a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and</p> <p>(b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.</p>	G	Active/ongoing	Compliant	Not triggered during the life of the Development
	STAGED SUBMISSION OF PLANS OR PROGRAMS				
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. Feedback received from DPE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted.</p> <p>Communications with DPE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p>

					<p>DPE approved extension of submission date to mid-March 2021</p> <p><b>2021 IEA Auditor</b> Comments: Latest submission of amended Ampol Kurnell Terminal OEMP Final Stage 2 on 7 March sighted.</p> <p>Shown evidence (dated 8 April) confirming DPE approval of the OEMP and Management Plans – including ACS C/Cell LTEMP</p>
	<b>DISPUTE RESOLUTION</b>				
B20	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.	G	Statement	Not triggered	<p><b>2023 Comment</b></p> <p>Nil instances during the Development period to date</p>
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	<p><b>2022 Comment</b></p> <p>Ongoing compliance verified during 2023 ISO Recertification Audit</p>
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	<p><b>2022 Comment</b></p> <p>Ongoing compliance verified during 2023 ISO Recertification Audit</p>

SCHEDULE C ENVIRONMENTAL PERFORMANCE AND MANAGEMENT					
HAZARDS AND RISKS					
Terms of Approval					
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	<b>2021 IEA</b>  Auditor noted NIL breaches  Ongoing compliance to PHA program assessed and verified during 2023 ISO Recertification Audit
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>2021 IEA</b>  Auditor noted NIL breaches
Demolition					
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	Note comments in "Applicable Phase" column  The relevant regulatory approval requirement has previously been met and assessed as 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	<a href="#">2023 Update:</a>  Not triggered

	Commissioning																			
C2	<p>The Applicant shall commission the development in accordance with Table 1 below:</p> <table><tr><th>System Description</th><th>Estimated Commencement of Commissioning</th><th>Estimated Commencement of Operation of System</th></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	<p>Note comments under “Activity Status” Phase</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>
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																		
	Pre-construction																			
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</p>	C	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA’s</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>															

	<p>South Wales Government's 'Best Practice Guidelines for Contaminated 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'.. 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>
	<b>Pre-Demolition</b>				
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></p> <p>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>	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</p>	<p><b>2021 Comments:</b></p> <p>Subsequent submissions of management plans to DPE have all been within timeframes</p>



	<p>(b) <u>DEMOLITION SAFETY STUDY</u></p> <p>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>			approval, thus non-compliant with the timeframe required; all plans subsequently approved	
	<b>Pre-commissioning</b>				
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></p> <p>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 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>	G	Completed	Compliant	Not triggered
		G	Completed	Compliant	<p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p> <p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p> <p><a href="#">2023 Update:</a></p> <p>SafeWork NSW current assessing Site's MHF</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>				documentation, as per Regulator's schedule
C4A	<p>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.</p>	D	Completed	<p>Compliant</p> <p>Assessed in 2017 IEA</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>
C5	<p>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.</p>	C	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>
	Pre-Start-up				
C6	<p>Pre-Start-up Compliance Report</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>	T	Completed	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</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>				
	<b>Post-Start-up</b>				
C7	<p><u>Post-Start-up Compliance Report</u></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	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA's</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>
C7A	<p><u>Fire Safety Study Review</u></p> <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> The study shall also be submitted to NSW Fire and Rescue for approval.</p>	D	Completed	<p>Fire Safety Study Review submitted to DPE and NSW Fire and Rescue Oct 2019</p>	<p>Not triggered</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>

C8	<p><b>Hazard Audit</b> Twelve months after all four systems being fully operational and every <u>three</u> 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). (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) (c) confirm that the throughput and storage quantities of potentially hazardous materials are consistent with the PHA. (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. (e) verify implementation of any measures arising from the reports submitted in respect of Conditions C2 to C5 of this consent.</p> <p>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.</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 DPE and DPE Response (Jan. 2016).</p> <p><u>2<sup>nd</sup></u> Hazard Audit (October 2018)</p> <p>Audit report and proposed actions submitted to DPE on 15 Oct 2018</p> <p>Actions tracked in MEET-002465</p> <p>DPE Response Letter (15 Nov 2018)</p>	<p><b>2021 IEA</b> confirmed all MEET-002465 actions completed</p> <p>Auditor noted NIL breaches</p> <p>3rd Hazard Audit conducted by Arriscar via RAM and Site Inspection in October 2021</p> <p>Report sent to DPE on 16 November 2021</p> <p>Agreed 2021 Hazard Audit actions in Cintellate - MEET-007172</p> <p><b>2022 Comment</b></p> <p>Next Hazard Audit due in 2024</p>
C9	<p><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</p>	G	Statement	Compliant	

	the reports submitted in respect of Conditions C2 to C8 of this consent inclusive, within such time as the Secretary may agree.				
	<b>Fire Risk Management During Demolition</b>				
C9A	<p>The Applicant shall:</p> <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> .
	<b>SOIL AND WATER</b>				
	<b>Discharge of Water</b>				
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	Non-Compliant	<p><b>2023 Comment:</b></p> <p>CUN 3505381 issued 16 Aug 23 for Quibray Bay Mangroves – requires ecological monitoring and assessment work April 7 2022 Flood event Refer to Section 2.4 for more details</p>
	<b>Erosion and Sediment Control</b>				

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> .
	<b>Imported Soil</b>				
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	Compliant  Assessed during 2017 IEA	<p><b>2022 ISO Audit:</b></p> <p>Auditor noted NIL breaches against waste log entries and disposal documents sampled</p> <p><b>2023 ISO:EMS Recertification Audit</b></p> <p>Auditor checked Kurnell Environmental Waste Log record – refer to report noting NIL breaches</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> </ul>	T & D	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	Compliant	<p><b>2023</b></p> <p>Ongoing compliance verified during 2023 ISO Recertification Audit</p>

	<p>(b) be approved by the Secretary (refer to Conditions D1 and D2 for timing);</p> <p>(c) In addition to the standard requirements for management plans (see Condition D3), this plan must include a Surface Water Management Plan, that:</p> <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> <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>				<p>Final Stage Two Kurnell OEMP reviewed by DPE in March 2020 – nil amendments to Management Sub Plans needed, other than changed site map in Traffic Management</p> <p>OEMP not approved at that time as waiting for final Site Auditor approved ACS LTEMP</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> <li>(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.</li> </ul>	D	<p>Plan Completed &amp; Approved</p> <p>Active/ongoing</p>	Compliant	<p>OEMP and Management Sub Plans reviewed during 2021 IEA</p> <p>Latest submission of 2021 amended Ampol Kurnell Terminal OEMP Stage 2 Final on 7 March sighted.</p> <p>Shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans – including ACS C/Cell LTEMP</p>
<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 been undertaken to test for the presence of ASS in accordance with 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.	<p><a href="#">2023 Update:</a></p> <p>Nil events involving ASS found during the life of the Development</p> <p>Terminal Soil and Water Management Sub Plan includes section dealing with ASS. DPE approved OEMP and all</p> <p>2021 IEA Auditor shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans – including Terminal Soil and Water Management Sub Plan</p>
	<b>Contamination Management</b>				
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</li> </ul>	C, D	<p>Plan Completed &amp; Approved</p> <p>Completed</p>	Compliant	<p><a href="#">2023 Update:</a></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 processes</p>



	<p>contamination, with any water that is found to have elevated levels of contaminants being disposed of via the on-site Wastewater Treatment Plant.</p> <p>(f) detail measures for managing asbestos encountered during works, including disturbances of soil and release of asbestos into the air;</p> <p>(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>.</p> <p>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</p> <p>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.</p>				<p><a href="#">2023 Update:</a></p> <p>Refer to body of this report for 2023 Remediation Action Plan activities.</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> <p>a) be submitted to the Secretary for approval (See condition D1A for timing);</p> <p>b) detail measures for the identification and monitoring of potentially contaminated soils and groundwater including the use of excavation visual and olfactory indicators; and</p> <p>c) include measures for managing potentially contaminated soils and groundwater during ground disturbance and excavation works.</p>	D	Completed	Compliant  Assessed in 2017 IEA	<p>Refer to comments in C15</p> <p>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</p>
	<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>;</p> <p>b) <i>Model Code of Practice – How to Manage and Control Asbestos in the Workplace, 2011 Safe Work Australia</i></p> <p>c) <i>Model Code of Practice – How to Safely Remove Asbestos, 2011 Safe Work Australia</i>; and</p> <p>d) <i>Protection of the Environment (Waste) Regulation 2005</i>.</p>	D	Completed	Compliant	<p>Not triggered</p> <p><b>2021 Update:</b></p> <p>Auditor noted NIL breaches of air monitoring &amp; and ACM/ACS waste management</p>

NOISE AND VIBRATION																	
Construction Noise Limits																	
C16	The Applicant shall ensure that the construction noise generated by the development does not exceed the criteria in Table 2 below.  Table 2: Construction Noise Criteria (dB(A)) <table><tr><th>Location</th><th>Day LAeq (15min)</th><th>Evening LAeq (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 LAeq (15min)	Evening LAeq (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	Not triggered	
Location	Day LAeq (15min)	Evening LAeq (15 min)															
R2-30D Cook Street	46	40															
At any other residence or other noise sensitive receiver	50	45															
Operational Noise Limits																	
C17	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: Table 3: Operational Noise Limits dB(A) <table><tr><th>Location</th><th>Day LAeq (15min )</th><th>Evening LAeq (15min)</th><th>Night LAeq (15min )</th><th>Night LAmax</th></tr><tr><td>At any private residential receiver</td><td>60</td><td>50</td><td>50</td><td>55</td></tr></table> Notes: <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 LAeq (15min )	Evening LAeq (15min)	Night LAeq (15min )	Night LAmax	At any private residential receiver	60	50	50	55	G	Active/ongoing	Compliant for Terminal (Land) and Demolition  Non-Compliant for shipping noise in 2016 IEA	Refer to previous DPE Annual Review reports.  Sound Science System remains insitu at the Wharf as a permanent operational tool  <b>2023 Comment:</b> Refer to DPE Annual Review, Section 2.4.2 for commentary on system  Note: <u>Nil</u> Community complaints in 2022
Location	Day LAeq (15min )	Evening LAeq (15min)	Night LAeq (15min )	Night LAmax													
At any private residential receiver	60	50	50	55													

Hours of Construction and Operation																				
C18	<div>With exception of the works identified in conditions C19 and C20, the Applicant shall comply with the hours detailed in table 4.</div> <div>Table 4: Construction, Demolition &amp; Operation Hours</div> <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>24 hours</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	24 hours				G	Active/ongoing	Compliant.	<div>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</div> <div>2023 Comment</div> <div>Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</div>
Activity	Day	Time																		
Construction	Monday - Sunday	7.00am – 10.00pm																		
Demolition	Monday - Sunday	7.00am – 10.00pm																		
Operation	Monday - Sunday	24 hours																		
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	<div>Construction works outside of the work hours identified in condition C18 above may be undertaken in the following circumstances:</div> <div>(a) works that are inaudible at nearest sensitive land receivers;</div> <div>(b) works that are consistent with Caltex's existing maintenance procedures and are in accordance with the existing EPL;</div> <div>(c) works agreed to in writing by the EPA or the Department;</div> <div>(d) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or</div> <div>(e) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.</div>	C & D	Completed	Compliant	<div>Not triggered</div> <div>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</div>															

	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>2023 Update:</b></p> <p>5 x shipping noise exceedences report to NSW EPA</p> <p>Nil Community Complaints</p> <p><b>2021 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>2021 IEA review of community complaints</p> <p>Auditor noted NIL other breaches</p>
<p><b>Dec 2019 - Environmental Noise Survey Commentary</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.</p> <p>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><b>2021 Update:</b></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 DPE</p> <p>Terminal Noise Mgmt. Plan further amended at the end of the shipping noise trial to incorporate identified process improvements. DPE approved the plan in Feb 2019.</p> <p>Further refinements post the end of Demolition phase incorporated into the final Noise Mgmt Sub Plan.</p> <p><a href="#">2023 Update:</a></p> <p>Ongoing compliance verified during 2023 ISO Recertification Audit</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> <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>	D	Plan Completed & Approved	Compliant  Assessed in 2016 and 2017 IEA	Not triggered  The Conversion to Terminal project concluded on 31 March 2020.
<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  Reviewed during 2016 and 2017 IEAs	Not triggered  The relevant regulatory approval requirement has previously been met and assessed as compliant

	AIR QUALITY MANAGEMENT				
	Dust Generation During Construction				
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	The Conversion to Terminal project concluded on <u>31 March 2020</u> .
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	See comments above
	Offensive Odour				
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	<b>2023 Comment:</b>  Refer to Section 2.4 for discussion on reported odour complaints and Odour Mitigation Program  Odour complaints data reviewed during last ISO audit in Nov 2022
	Operating Conditions				
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>(d) minimise surface disturbance of the site, other than as permitted under this consent.</li> </ul>	G	Active/ongoing	Compliant	<b>2023 Comment:</b>  Refer to comments above and Section 2.4 for further discussion on Odour Mitigation Program

	Air Quality Management Plan				
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><b>2021 Update:</b></p> <p>Reviewed during 2021 IEA</p> <p>Latest submission of 2021 amended Ampol Kurnell Terminal Stage 2 Final OEMP on 7 March sighted.</p> <p>2021 IEA Auditor Shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans – including Air Quality Management Sub Plans</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 DPE and verified by IEA Auditor in 2017.</p>	<p><b>2021 Update:</b></p> <p>Further amendments to the Plan were made in 2018 to account for the ACS Containment Cell. Above mentioned MP Further revised post end demolition (ASC CC) works. Revised and approved by DPE. Plan posted to Ampol Public website.</p> <p>Conversion project concluded 31 Mar 2020</p>



	<b>Air Quality Verification</b>				
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 2019 Update:</b></p> <p>The Air Quality Verification Study was submitted to DPE in Jan 2019</p> <p><b>Note:</b></p> <p>Study reviewed during 2021 IEA</p>
	<b>HERITAGE MANAGEMENT</b>				
	<b>Archival Record</b>				
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> <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.</p>	C	<p>Completed</p> <p>Assessed in 2016 and 2017 IEA's EA</p>	<p>Compliant</p> <p>Further changes to the approved Heritage Strategy – DPE notified 26 Jul 18</p> <p>Amended report sent 27 Aug 18</p>	<p>Note:</p> <p>Caltex Kurnell Refinery History book reviewed by auditor during 2021 IEA</p>

	Heritage Management Strategy				
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	<p>Completed Verified/Completed</p> <p>Assessed in 2016 and 2017 IEA</p>	<p>Compliant</p> <p>Assessed in 2016 and 2017 IEA</p> <p>Refer to above comments</p>	<p>Note comments under "Activity Status" Phase</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</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	<p><b>2021 IEA</b></p> <p>Auditor noted NIL breaches</p>
	Other Heritage Management and Mitigation Measures				
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>	<p><b>2021 IEA</b></p> <p>Auditor noted NIL breaches</p>

32A	Within two months of its <u>scheduled demolition</u> , 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).
32B	Within two months of its <u>scheduled demolition</u> , 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	<b>As per 2018 Update:</b>  Refer to C30 for comments re amendments to the Strategy  The Conversion to Terminal project concluded on 31 March 2020.
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 <u>construction and demolition</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 & D	Completed	Compliant	<b>2021 Update:</b>  Nil heritage object or aboriginal artefacts or objects identified during the conversion or demolition phases of Development.  Reporting requirements referenced in Site Induction program
C34	If during the course of <u>construction and demolition</u> 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	<a href="#">2023 Update:</a>  Annual NPI and NGER reports issued for the site.
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;	G	Completed Active/ongoing	Compliant  Assessed in 2016 and 2017 IEA	<a href="#">2023 Comment:</a>  Ongoing compliance verified during 2023 ISO:EMS Recertification Audit  <b>2021 Update:</b>  The Conversion to Terminal project concluded on <u>31 March 2020</u> .  Reviewed during 2021 IEA  Latest submission of 2021 amended Ampol Kurnell Terminal OEMP Stage 2 Final on 7 March sighted.  Auditor shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans – including Traffic Management Sub Plan

	<ul style="list-style-type: none"> <li>· drivers adhere to the code of conduct; and</li> <li>· compliance with the relevant conditions of this consent.               <ul style="list-style-type: none"> <li>(h) include a program to monitor the effectiveness of these measures; and</li> <li>(i) (i) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.</li> </ul> </li> </ul>				
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> <ul style="list-style-type: none"> <li>(a) be prepared in consultation with Council;</li> <li>(b) be approved by the Secretary (refer to conditions D1A for timing);</li> <li>(c) include the designated routes for demolition traffic to the demolition areas within the site;</li> <li>(d) include details of traffic management arrangements for the cooling water outlet and intake pipeline removal works within the road reserves; and</li> <li>(e) outline the procedures for the notification of all potentially affected persons prior to and during the pipeline removal works within the road reserves.</li> </ul>	D	Completed	Compliant  Compliant  Assessed in 2017 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 <u>and operational personnel</u>, 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	<a href="#">2023 Update:</a>  Remains in compliance with TMP

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	<a href="#">2023 Update:</a>  Ongoing compliance to waste mgmt. program assessed and verified during 2023 ISO Recertification Audit
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	The Conversion to Terminal project concluded on <u>31 March 2020</u> .  <a href="#">2023 Update:</a>  Ongoing compliance to waste mgmt. program assessed and verified during 2023 ISO Recertification Audit
C39 A	The Applicant shall ensure that all hazardous materials identified in the structures to be demolished are <u>removed prior to demolition</u> 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 <u>demolition works</u> to maximise opportunities for the beneficial reuse and recycling of such waste materials.	D	Completed	Compliant	The Conversion to Terminal project concluded on <u>31 March 2020</u> .
<b>Waste Management Plan</b>					
C40	<p>The Applicant shall prepare and implement a <u>Waste Management Plan</u> 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>2023 Comment:</b></p> <p>Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</p>
<b>Demolition Waste and Resource Management Plan</b>					
C40 A	<p>The Applicant shall prepare and implement a Demolition Waste and Resource Management Plan for the <u>demolition works</u> 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>This phase has been completed</p> <p>Plan Completed &amp; Approved</p>	Compliant	<p>See above comments</p> <p>Demolition Project ended 31 March 2020</p>

	Waste Received from Off-Site				
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	This phase has been completed	Compliant	<p><b>As per 2018 Update:</b> Outlet line successfully removed with nil observable environmental effect</p> <p>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</p>
	BIODIVERSITY & ECOLOGY				
	Biodiversity Management Plan				
C42	<p>The Applicant shall prepare and implement a Biodiversity 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) include measures to be taken to minimise impacts on flora and fauna;</li> <li>(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.</li> </ul>	G	<p>Active/ongoing</p> <p>Plan Completed &amp; Approved</p>	Compliant	<p><b>2023 Comment:</b></p> <p>Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</p> <p><b>2021 Update:</b></p> <p>2021 IEA</p> <p>Auditor shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans – including Biodiversity and Weed Management Sub Plan</p>



	Pest, Vermin & Noxious Weed Management				
C43	<p>The Applicant shall:</p> <ul style="list-style-type: none"> <li>(a) implement suitable measures to manage pests, vermin and declared noxious weeds on site;</li> <li>(b) measures to be taken to prevent the spread of any identified noxious/exotic weeds off site; and</li> <li>(c) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in surrounding area.</li> </ul> <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>	G	Active/ongoing	Compliant	<p><b>2023 Update:</b></p> <p>Native vegetation along the Yena Gap Pipeline in the Kamay Botany Bay National Park was trimmed under WSP Ecologist supervision, in line with the new (2023) approved National Parks And Wildlife Service Consent.</p> <p>Annual maintenance task (PM M7) established to inspect (and trim if needed) defined area around the pipeline</p>
C43 A	<p>The Applicant shall update and implement the Biodiversity and Weed Management Plan for the <u>demolition works</u> 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	<p>Plan Completed &amp; Approved</p> <p>This phase has been completed</p>	Compliant	<p><b>2021 Update:</b></p> <p>Reviewed during 2021 IEA</p> <p>Auditor noted NIL breaches</p> <p>DPE approval of the OEMP and all Management Plans – including Biodiversity and Weed Management Sub Plan</p>

	Continental Carbon Pipeline				
C43 B	Within three months after <u>the removal of the Continental Carbon Pipeline</u> , 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.	D	This phase has been completed	Compliant  Removed in 2017  Assessed in 2017 IEA	The Conversion to Terminal project concluded on 31 March 2020.
	Cooling Water Outlet Management Plan				
C43 C	<p>The Applicant shall prepare and implement a Cooling Water Outlet Management Plan for the <u>demolition works</u>. 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	This phase has been 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>The Conversion to Terminal project concluded on <u>31 March 2020</u>.</p>

	Protection of Marton Park Wetlands				
C44	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.	G	Completed	Compliant  Assessed in 2016 IEA	<b>As per previous updates:</b>  DA surrendered (March 2016).
	<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>2021 Update:</b>  2021 IEA:  Auditor noted NIL breaches
	<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>2023 Comment:</b> Ongoing compliance verified during 2023 ISO:EMS Recertification Audit
	<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	<b>2023 Comment:</b> Ongoing compliance verified during 2023 ISO:EMS Recertification Audit

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 <u>construction and demolition works</u> 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: <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> </ul> </li> </ul>	C	<p>This phase has been completed</p> <p>Plan Completed &amp; Approved</p>	<p>Completed</p> <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>DPE Approved Construction EMP and Management Plans remains available on Ampol Public website</p>	<p><b>2021 Comments::</b></p> <p>Conversion works completed in <u>2016</u></p> <p>Note comments under "Activity Status" Phase</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p>

<p>(vii) Stormwater and Wastewater management; (viii) Traffic management; (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> </ul> </li> </ul>	D	Plan Completed & Approved	<p>Completed</p> <p>Assessed in 2017 IEA</p> <p>DPE Approved Demolition and Management Plans remains available on Ampol Public website</p>	<p>Not triggered</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 DPE and approved along with other Plans impacted by MOD2</p> <p><b>2021 Update:</b></p> <p>Compliance during demolition phase assessed during 2021 IEA</p> <p>Note comments under “Activity Status” Phase</p> <p>The relevant regulatory approval requirement has previously been met and assessed as compliant</p> <p>Auditor noted NIL breaches</p>

<p>xi. Heritage management strategy (See Condition C31);  xii. Cooling water outlet management (see Condition C42B);  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.  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 <u>Operational Environmental Management Plan</u> 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	<p><b>2023 Comment:</b></p> <p>Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</p> <p><b>OEMP remains current, as approved by DPE</b></p> <p><b>2021 Update:</b> Submission of Stage 2 Terminal OEMP &amp; Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020. Feedback received from DPE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted before OEMP is approved. Communications with DPE (P. Copas) re availability of LTEMP due to delays by Site Auditor.</p> <p>DPE approved extension of submission date to mid-March 2021 Reviewed during 2021 IEA</p> <p>Latest submission of 2021 amended Ampol Kurnell</p>



					<p>Terminal OEMP Stage 2 Final on 7 March sighted.</p> <p>Auditor shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Plans</p>
	<b>Management Plan Requirements</b>				
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>	T	<p>Active/ongoing</p> <p>Mgmt. Plans Completed</p>	Compliant	<p><b>2021 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 DPE extension in 2020</p> <p>Latest submission to DPE of 2021 amended Ampol Kurnell Terminal OEMP Stage 2 Final on 7 March sighted.</p> <p>Auditor shown evidence (dated 8 April) confirming DPE approval of the OEMP and all Management Sub</p>

	<i>Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.</i>				Plans – including ACS C/Cell LTEMP
	<b>Annual Review</b>				
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; <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> </li></ul>	T	<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;</li> <li>• 2020,</li> <li>• 2021,</li> <li>• 2022, and</li> <li>• 2023</li> </ul> <p>Active/ongoing</p>	Compliant	<p><b>2023 Comment:</b></p> <p>This is the 2023 Annual Review report</p> <p>All previous Annual Review Reports posted to Ampol Public website</p>

	Revision of Strategies, Plans & Programs				
D5	<p>Within 3 months of the submission of an:</p> <p>(a) annual review under Condition D4 of this schedule; (b) incident report under Condition D6 of this schedule; (c) audit report under Condition D8 of this schedule; and (d) any modifications to this consent, 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/T	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/T	Active/ongoing	Compliant	<p><b>2022 Comment:</b></p> <p>DPE, EPA and DOH duly notified of April flood event</p> <p><b>Additionally:</b></p> <p>The EPA receive email notifications of any ship that exceeds the EPL night-time noise limit</p> <p><u>12 Sept 2022</u> - Notified by L. Papoulias that DPE no longer wish to be notified when a ship exceeds the night-time noise limit</p>

	INDEPENDENT ENVIRONMENTAL AUDIT				
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 and any relevant EPL and/or Water License (including any assessment, plan or program required under these approvals);</li> <li>(d) review the adequacy of any approved strategy, plan or program required under these approvals; and</li> <li>(e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals.</li> </ul> <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>	G	Active/ongoing	<p>Compliant</p> <p>Note Non-Compliance in 2016</p> <p>(2016 IEA started late)</p>	<p><b>2021 Update:</b></p> <p>2021 IEA completed Jan-Feb 2021 – identified one (1) non-conformance against <b>C4B – Demolition ERP</b></p> <p>Requirement to amend ERP to account for Tank 101 demolition and send to DPE.</p> <p>Although ERP was updated, evidence confirming Project manager sent into DPE could not be located.</p>
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 – refer to comments in D4
	ACCESS TO INFORMATION				
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <ul style="list-style-type: none"> <li>(a) make the following information publicly available on its website: <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> </ul> </li> </ul>	G	Active/ongoing	<p>Compliant</p> <p>Consent documents and DPE Approved Construction, Demolition and Terminal EMP's and all Management Plans available on Ampol Public website</p>	<p><b>2023 Comment:</b></p> <p>All documents/ information is posted on Ampol Public web site. Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</p>

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	<ul style="list-style-type: none"> <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, <i>Note: This requirement does not require any confidential information to be made available to the public</i></p>				<p><b>2021 Update</b></p> <p>2021 IEA - Auditor confirmed all documents and information is posted on Ampol Public web site</p> <p>Auditor noted NIL breaches</p>
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**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	This phase has been completed	Compliant	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	This phase has been completed	Compliant	<b>2021 Update:</b>  2021 IEA – auditor noted EPA accredited site auditor appointed (Andre-Karl Smit – GHD)  Sighted accreditation details on the NSW EPA website ref <i>Contaminated Lands Mgmt Act 1997</i>

	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	This phase has been completed	Compliant	<p><b>2021 Update:</b></p> <p>2021 IEA – auditor noted DPE and EPA submission evidence sighted 25/2/2019 for Site Audit Statement and Site Audit Report (AKS10-10186 dated 12/12/18).</p>
	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	This phase has been completed	<p>Compliant</p> <p>DPE approved CCMP available on Ampol Public website</p>	<p><b>2021 Update:</b></p> <p>2021 IEA – auditor sighted evidence of NSW EPA consultation and approved CCMP on website.</p> <p>Approval letter dated 15/2/18 sighted CCMP</p> <p>available on Ampol Public website</p>

C51	The Applicant shall only place ACS sourced from within the site in the containment cell.	D	This phase has been completed	Compliant	
C52	Upon completion of the construction aspects associated with the ACS management works (which includes closure of the containment cell), the Applicant shall prepare a Containment Cell Final Report. The report shall: <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	This phase has been completed	Compliant	<b>2021 Update:</b>  2021 IEA – auditor sighted confirmation of receipt by DPE 8/10/20.  Sighted AECOM Final Report 25/11/2020
<b>Long Term Environmental Management Plan</b>					
C53	Prior to the completion of the construction aspects associated with the ACS management works, the Applicant in consultation with the EPA, shall prepare a LTEMP 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	D/T	Active/Ongoing	Compliant	<b>2021 Update</b>  2021 IEA – auditor sighted DPE receipt email re C53 ACS Containment Cell LTEMP-incl RAR-SAS  Sighted DPE receipt email re Kurnell Terminal Stage 2 Final OEMP on 08/03/2021  Sighted DPE Approval Letter re:  Stage Two Final OEMP incl. ACS Containment Cell LTEMP-incl RAR-SAS on 08/04/2021



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> <p>(a) implement the approved LTEMP and manage the containment cell in accordance with the approved LTEMP; and</p> <p>(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.</p>	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) completed</p>	<p>Refer to comments in C53</p> <p><a href="#">2022 Comment:</a></p> <p>Ongoing compliance to M7 PM program elements verified during Nov ISO Audit</p> <p>2021 IEA – auditor noted:</p> <p>Re (a) Sighted evidence M7 PM program:</p> <p>maintenance of ACS C/Cell -GW well gauging and leachate management system &amp; Weed mgmt. insitu at C/Cell</p> <p>Re (b) amendments to Planning Certificate (SSC)</p> <p>Sighted SSC confirmation email dated 19/04/2021 and amended Planning Certificate No: 731475 dated 22/04/2021-ref: Sect 21(e) for SAS and page 22 Additional Information re EMP</p>
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	Pipeway Validation				
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 DPE and NSW EPA - 8 Oct 2020	<p>2021 IEA – auditor noted:</p> <p>Sighted Modification works – Pipeways Closure report, dated 28/04/2020 meets C55 requirements.</p> <p>Sighted confirmation correspondence of submission of Validation Report to DPE and NSW EPA - dated 01/7/2020</p> <p>Sighted additional correspondence re Pipeways Closure from EPA dated 23/7/2020</p>

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

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	Conditions	<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	Comments/Actions

	Pre-Commissioning				
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, 3, <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>Note: This requirement does not require any confidential information to be made available to the public.</p>	D	<p>Completed</p> <p>Tank 101 demolished in 2018</p>	Compliant	<p>Refer to previous SSD5544 D9 comments made</p> <p>2021 IEA Auditor noted NIL breaches</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 during the tank demolition works and a copy of the plan shall be submitted to the Secretary.</p>	D	<p>Completed</p>	<p>Compliant</p> <p>Demolition of structures e.g. tanks already covered in ERP and scenarios</p>	<p>Conversion to Terminal project concluded on <u>31 March 2020</u>.</p> <p>Reviewed during 2021 IEA</p> <p>Auditor noted NIL breaches</p>
	Hours of Construction and Operation				
C19	<p>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</p>	D	<p>Completed</p>	Compliant	<p>Refer to comments made in C4A</p>

**SSD 5544 MOD 4 2018 - Extension of Demolition 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
	Pre-Commissioning				
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	Refer to notes under MOD 5
B7A	The Demolition works associated with the development must not extend beyond 10 June 2019	D	Completed	Compliant	

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 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>(d) 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/T	Active/Ongoing	Compliant	<p><b>2023 Comment:</b></p> <p>Ongoing compliance verified during 2023 ISO:EMS Recertification Audit</p> <p>Note: Recurrent actions assigned in Cintellate to review the Ampol Public Website every 3 months for currency and accuracy of content</p> <p>Reviewed during 2021 IEA All such documents available on the Ampol Public Website Auditor noted NIL breaches</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**

	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				
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 and (h) MOD 5 (i) conditions of this consent	G	Statement	Compliant	<b>2021 Update:</b>  Reviewed during 2021 IEA  Auditor noted NIL breaches
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>  A further extension to the project end date (March 2020) was approved by DPE  The Conversion to Terminal project concluded on <u>31 March 2020</u> .

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>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>Refer to previous SSD5544 D9 comments made</p> <p>2021 IEA Auditor noted NIL breaches</p>
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**SSD 5544 MOD6 21 January 2020 - Extension of ACS Management Works Period**

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	Conditions	<p>Applicable Phase:</p> <p>Conversion (C)</p> <p>Demolition Terminal Operations (D/T)</p> <p>or</p> <p>General (applies to all phases) (G)</p>	<p>Activity Status:</p> <p>Completed</p> <p>Active/ongoing</p> <p>Inactive</p>	<p>Compliance Status</p> <p>Compliant</p> <p>Not Compliant</p> <p>Not Triggered</p>	<b>Comments/Actions</b>
B2	<p>The Applicant shall carry out the Development generally in accordance with the:</p> <p>(a) EIS;</p> <p>(b) RTS;</p> <p>(c) site layout plans and drawings in the EIS (see Appendix A);</p> <p>(d) MOD 1;</p> <p>(e) MOD 2</p> <p>(f) MOD 3</p> <p>(g) MOD 4</p> <p>(h) MOD 5 and</p> <p>(i) MOD 6</p>	D	Completed	Compliant	<p><b>2021 Comments:</b></p> <p>Both the capping of the ASC Containment Cell and the demolition works <u>concluded</u> as of 31 March 2020</p> <p>ACS CC Site assessment reviewed during 2021 IEA</p>

	(i) conditions of this consent				Auditor noted NIL breaches
B7B	Notwithstanding Condition B7A, the <a href="#">ACS Management works must not extend beyond 31 March 2020</a>	D	Completed	Compliant	The Conversion to Terminal project concluded on <u>31 March 2020</u> .
D9	<p>The Applicant shall, to the satisfaction of the Secretary:</p> <p>(f) 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>(g) 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 DPE Approved EMP's and Management Plans available on Ampol Public website</p>	<p><b>2021 Update:</b></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>Refer to comments made above and previous SSD5544 D9 comments made</p> <p>2021 IEA Auditor noted NIL breaches</p>



## APPENDIX 3 Kurnell Site Maps

Figure A – Kurnell Regional Context and SSD5544 Development Consent Boundaries



**Figure B - Plot Plan A1-18588 titled “Environment Protection Licence Identification Points”, Version 7, dated 14 February 2020**

