2021 ANNUAL REVIEW ENVIRONMENTAL PERFORMANCE

DEVELOPMENT APPLICATION SSD 5544

Ampol Australia Petroleum Pty Ltd

2 Solander Street
Kurnell NSW 2231

Reporting Period: *1 January 2021 to 31 December 2021*

AMENDED

Report Complied by:

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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.*

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

This 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 required in the Consent condition. This report is divided in three parts:

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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 below. This table includes the commencement date and completion date for each activity under the Development Approval.

TABLE 1- Overview of Activities in Development 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		**31 March 2020**	

1.2 DEVELOPMENT ACTIVITIES DURING THE LAST TWELVE MONTHS

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

TABLE 2 - Development Activities in 2021

Activity	Potential Environmental Impacts	Number of incidents
Note: Nil Conversion or Demolition works in 2021. Conversion of the refinery to a terminal concluded on 31 March 2020 when the last of the SSD5544 Mod 6 works were completed, specifically the last stage of capping and planting of nature grasses on the Asbestos Contaminated Soil (ACS) Containment Cell.	Nil	Nil
Operation of Finished Product Import and Distribution Terminal - referred to as Kurnell Terminal (the 'Site'), continues to operate in accordance with the SSD5544 conditions of consent	Soils, Groundwater and Contamination, Water (Surface), Air Quality (odour) and Asbestos (associated with remediation works), Waste, Shipping noise during vessel berthing/product discharge activities Wharf	Refer to Part 2. for incidents details relating to Terminal operations

1.3 TERMINAL ENVIRONMENTAL MANAGEMENT CONTROLS

Consistent with the requirements of SSD5544 Approval (DPIE), the Site and remediation project activities carried during the 2021 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);

As detailed in the 2020 Annual Environmental Performance Review, prior to the completion of Demolition related works in early 2020, all DPIE approved Demolition Management Plans were superseded by the final version of the S*tage 2 Final Terminal Operational Environmental Management Plan (OEMP)* and its associated Management Sub Plans (as noted above).

The S*tage 2 Final OEMP* was initially submitted to the DPIE in April 2020 with a draft version of the ASC Containment Cell Long-Term Environmental Management Plan (LTEMP). The OEMP and the other environmental management sub plans were assessed as complying with SSD5544 - D2 requirements. The DPIE delayed issuing an Approval letter until the NSW EPA Accredited Contaminated Land Site Auditor assigned to the MOD2 (ACS Works) approved the ACS LTEMP to allow it to be included in Stage 2 Final Terminal OEMP and resubmitted to the DPIE for review.

At that time, an explanation was provided regarding the absence of a final version of the LTEMP, namely that the Site Auditor required:

- addition of PFAS in the regular groundwater monitoring program for the ACS Cell
- additional sampling required in order to provide a satisfactory baseline data set. The additional works included inclusion of analytes not previously required to be tested by the Site Auditor

The LTEMP was later updated to account for the additional data, in line with Site Auditor requirements but time was also needed for the Site Auditor to review and respond to, as needed. These resulted in further delaying the sign off of the final document until early 2021.

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 DPIE on 7 March 2021.

The revised *Stage 2 Final Terminal* OEMP (including all Sub-Plans) and the ACS Cell LTEMP was subsequently approved by the DPIE on 8 April 2021.

Note: The approved OEMP (a redacted version), including the above-mentioned management sub plans are published on the Ampol Public Website, in accordance with the Development Approval requirements. All documents relating to past development activities and the Kurnell Terminal 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 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 837 (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 837 (EPL 837) 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* 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 streams333
- 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 Environment Protection Licence 837 (EPL 837), as applicable to the use of chemicals, such as pesticides and herbicides, etc.
- 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 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

Note that **nil** amendments to the above-mentioned Management Sub-Plans were required

Kurnell Terminal Stage 1 Interim Operational Environmental Management Plan (OEMP) applied to all aspects of site operations for the remaining period of 2020.
during the 2021 reporting period.

The requirements detailed in the approved S*tage 2 Final OEMP*, inclusive of the Management Sub-Plans detailed above applied to all aspects of site operations for the during the 2021 reporting period.

1.5 DEVELOPMENT ACTIVITIES FOR NEXT (2022) CALENDAR YEAR

The Demolition phase of the conversion of the Kurnell refinery to a finished product import and distribution terminal concluded on 31 March 2020. Therefore, there are nil development activities (as defined earlier) planned for 2022 and beyond.

The Kurnell Terminal will continue to operate as a finished product import and distribution terminal with nil modifications planned. 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

- Remediation project work will continue throughout the upcoming year, operating under a number of Development Approval conditions issued by Sutherland Shire Council (SSC).

- The Wharf Cathodic Protection Program will continue into 2023 as well

PART 2 - HISTORICAL and 2021 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 within the site's EPL licence conditions and set discharge limits - refer to Table 7A – 7F inclusive for the WWTP (EPL Monitoring Point 27) environmental performance details.

Note:

In 2016 the operational control of the pipeline between Kurnell and Newcastle transferred from Banksmeadow Terminal to the Kurnell Terminal. The Sydney to Newcastle Pipeline continues to operation without incident and in line with its specific Operational Environmental Management Plan. The environmental performance of the Sydney to Newcastle Pipeline is not listed in the SSD5544 Approval and therefore, is not included in this report.

2.2 TERMINAL ENVIRONMENTAL MANAGEMENT SYSTEM CONTROLS

The 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.

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

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

2018-2020 Audit Dates	**ISO14001:2015 Findings**	
	No. of Non-Conformance (NC)	**Opportunities for Improvement Identified (OFI)**
SV1 - 16 to 8 May 2018	One minor NC	Five
SV2 - 20 to 22 November 2018	Nil	Nil
SV3 – 03 to 03 September 2019	Nil	Nil
Recertification Audit (via RAM) 12 – 14 May 2020	Nil	Nil
SV1 – 2 February 2021	Nil	One
SV2- November 2021	Nil	Two

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

2.2.1 Kurnell Environmental Protection Licence (EPL) 837

Key to the site's OEMP is its 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 6 – Description of Kurnell Terminal EPL 837 Monitoring and Discharge Points

EPA Identification No	Type of Monitoring or Discharge Point	Location Description
2	Discharge to waters	Submerged ocean outfall at Yena Gap labelled "2" on drawing No. 18588 titled "Environment Protection Licence EPA Identification Points" Note: Monitoring is undertaken at Point 27 for EPA ID No.2
9915	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" Note:

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

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

Summaries of the monitoring results for each monitoring point are posted on the Ampol Public website with details of the last six years included in this Annual Review.

The pollutants monitored at these points; their licence concentration limits and monitoring results are presented in Section 2.3. The prevention of off-site noise, dust and offensive odours are licence and consent condition requirements. The site's performance against these requirements will also be discussed as part of the overview of the calls made to the 24-Hour Community Hotline in Section 2.3 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 Conditions of Consent for SSD 5544:

- Tables 7A - F show the summary of monitoring results for the licenced monitoring points 15, 16, 28 and 29 for the calendar years 2016 – 2021
- some data is represented in Figures 1 to 4

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

- Table 8 contains the annual summary of the monitoring results for Monitoring Point 27
- Table 9 contains a summary of the asbestos monitoring (air) results during the demolition phase of the conversion project, including the filling and capping of the ASC Containment Cell.
- Table 9A contains a summary of the asbestos monitoring (air) results during Remediation Project works only.
- Table 10 and Figure 7 provide an overview of the calls made to the 24-Hour Kurnell Community Hotline

TABLE 7A – Licenced Monitoring/Discharge Points: 2021

Monitoring Period	**2021**								
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 7A – Continue

Monitoring Period	**2021**								
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 7B – 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 7B – 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 7C – 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 7C – 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 7D – 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 7D – Continue

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

TABLE 7E – Licenced Monitoring Points: 2017

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

TABLE 7F – Licenced Monitoring Points: 2016

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

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.

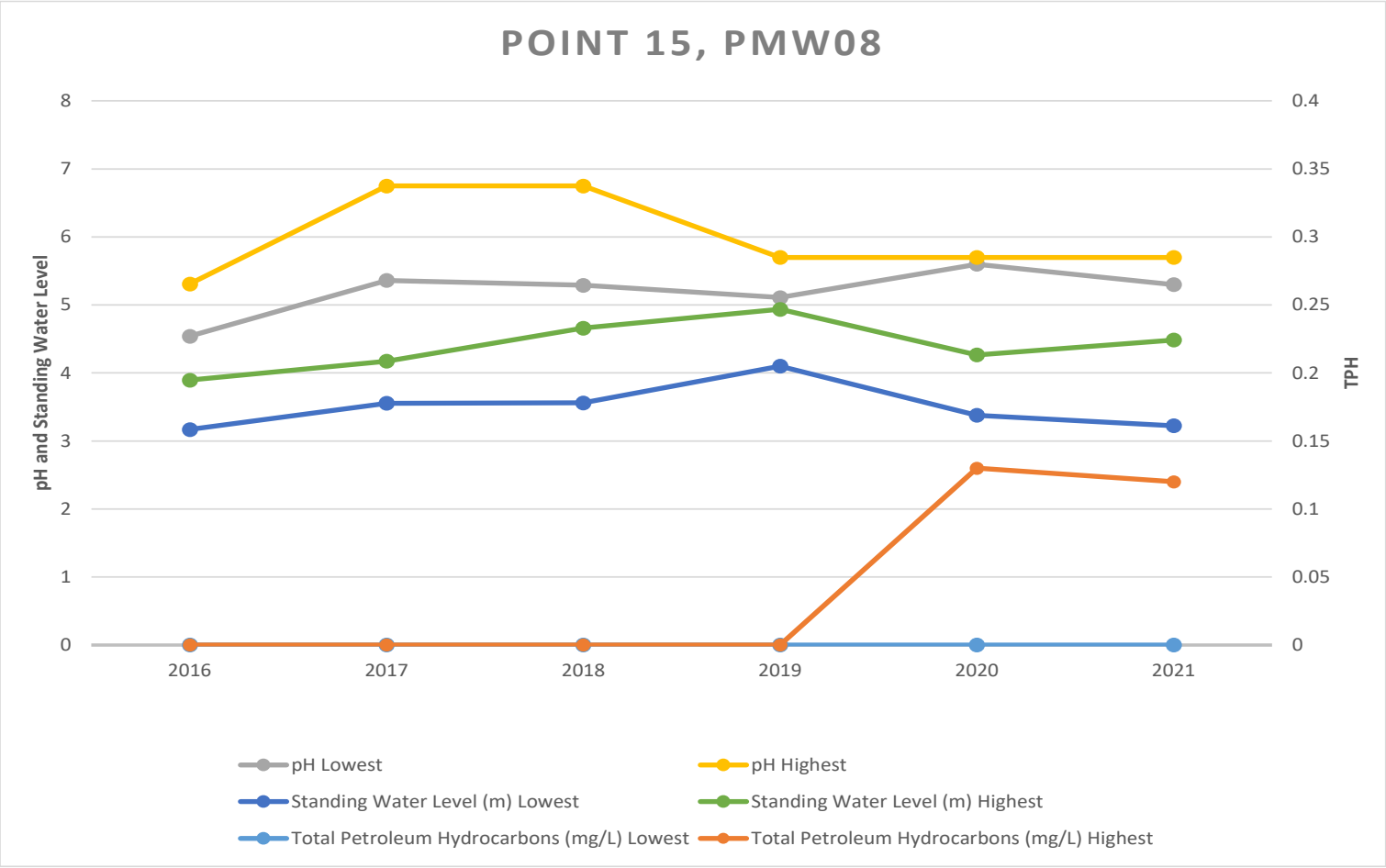

Figure 1. Monitoring Point 15 Data – 2016 to 2021

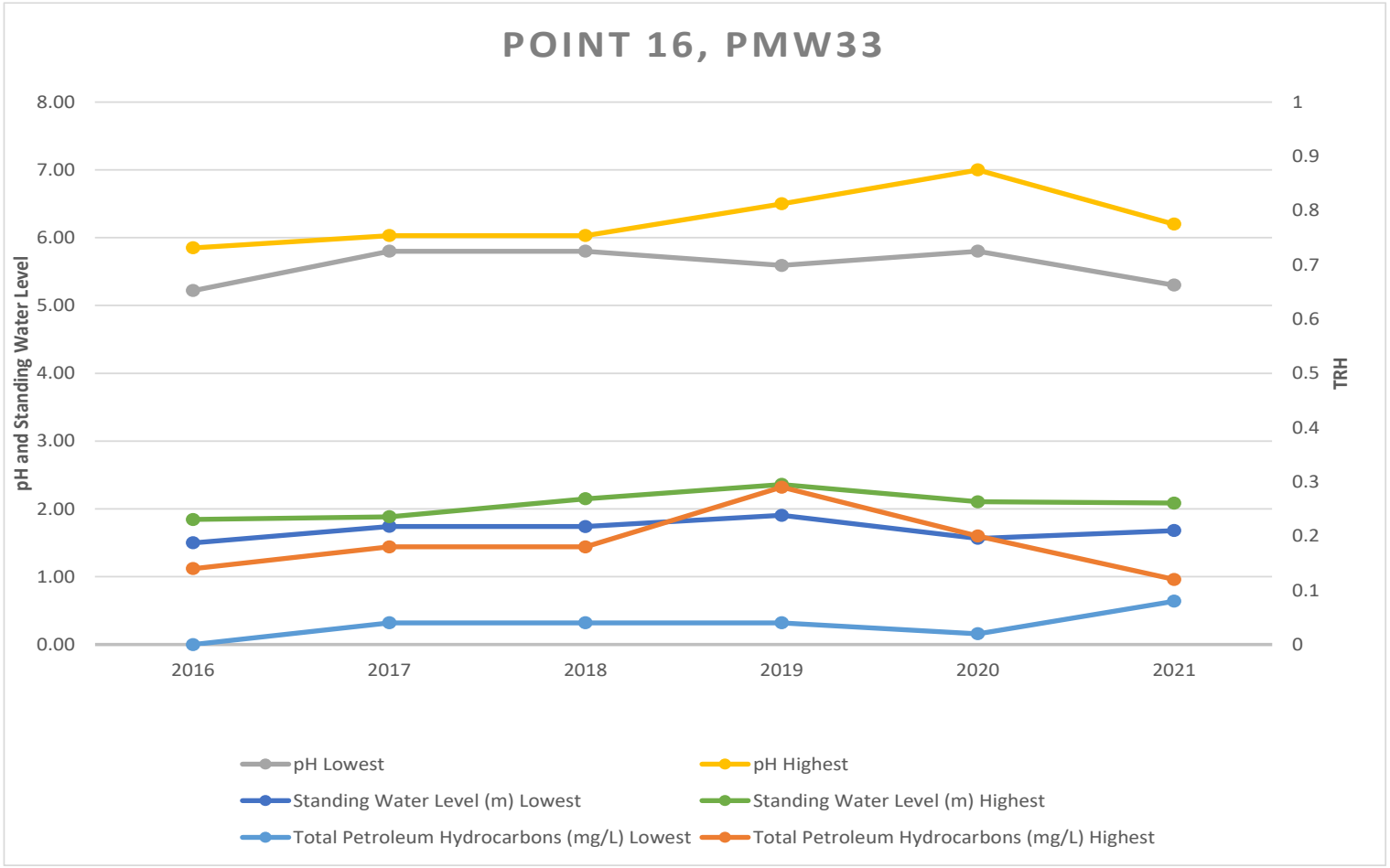

Figure 2. Monitoring Point 16 Data – 2016 to 2021

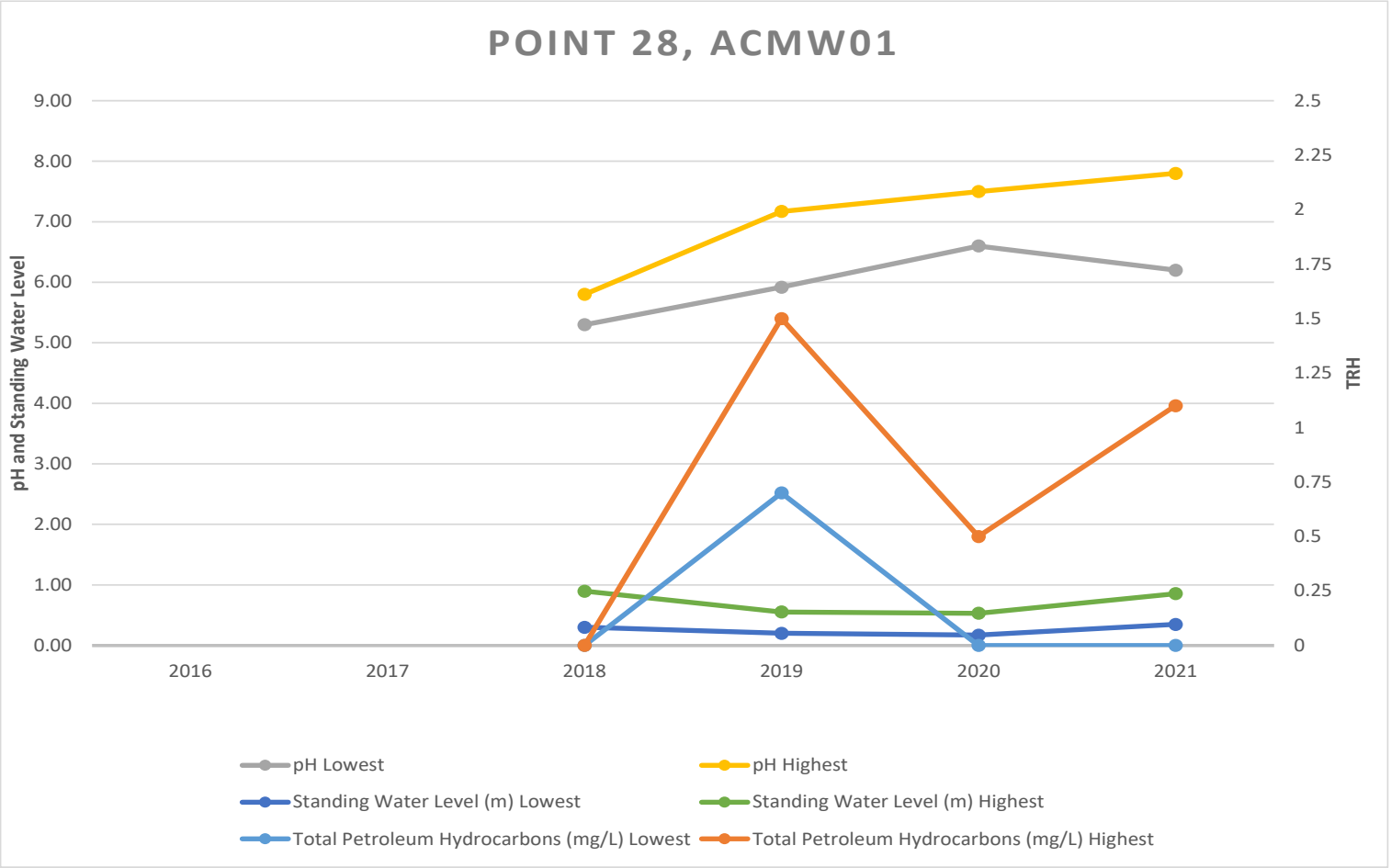

Figure 3. Monitoring Point 28 Data – 2016 to 2021

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

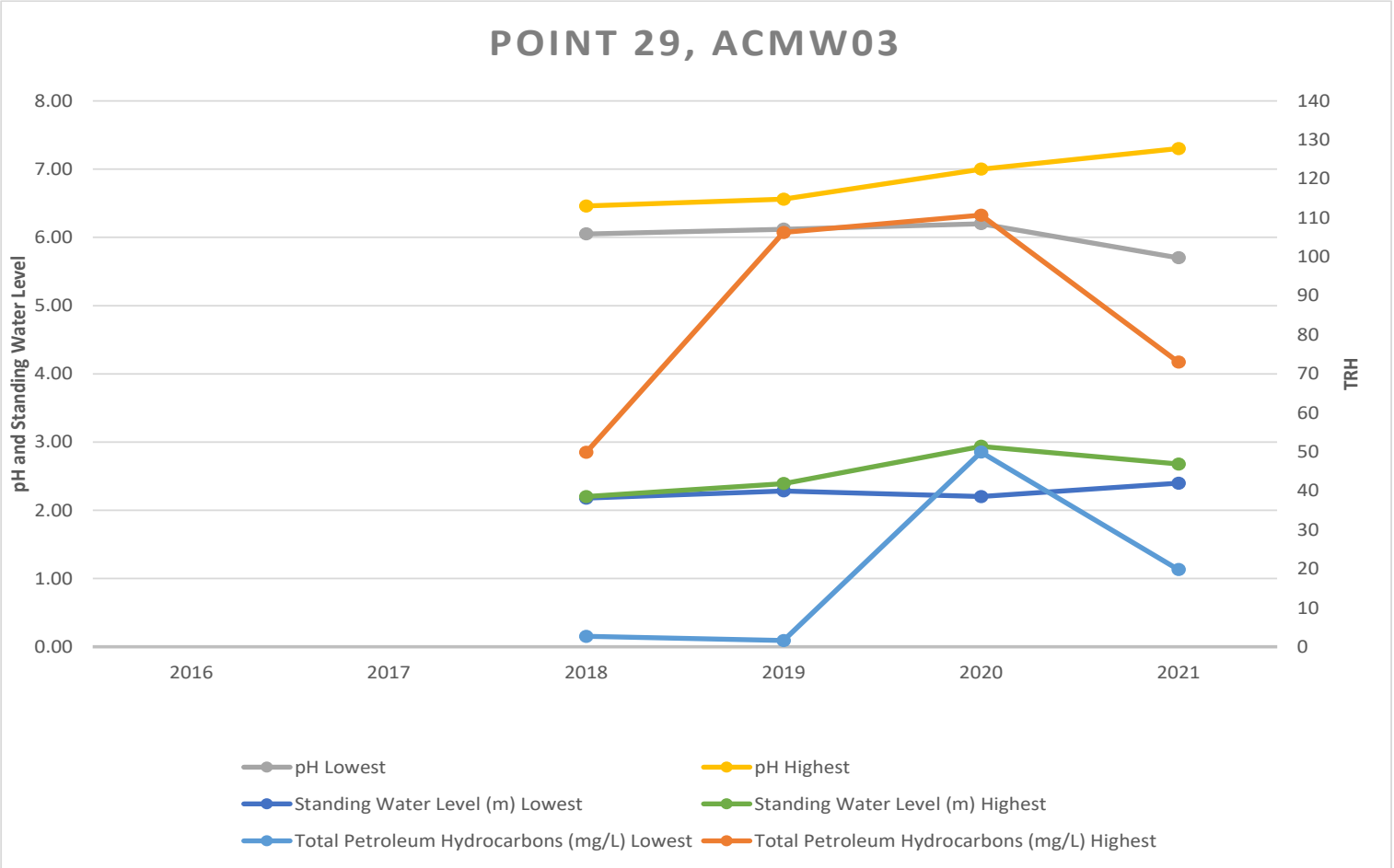

Figure 4. Monitoring Point 29 Data – 2016 to 2021

Note: Well ACMW03 was established in 2018 as part of the development of the asbestos containing soil containment cell.

Table 8A – Point 27: Normal Operation Conditions

Monitoring Period	**2021**									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	48	48	48	48	48	48	No Missing Data
Lowest	18.0	6.5	0	<5	<0.05	<0.1	<0.01	<1	<2	
Highest	31.1	7.5	9311	5	<0.05	0.1	0.14	16	8	
Exceedance (yes/no)	No	No	N/A	No	No	No	No	No	No	

Table 8B – Point 27: Normal Operation Conditions

Monitoring Period	**2021**										
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**	Reason for Missing Data
Licence Limit		None		None		None	None	None	0.5	None	
Unit of Measure	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	mg/l	
Monitoring Frequency Required by Licence	Monthly										
Averaging Period	24 Hour Composite Sample										
No. Samples Collected	12	12	12	12	12	12	12	12	12	12	No Missing Data
Lowest	0.001	<0.002	<0.001	<0.0002	<0.001	<0.0002	<0.001	<0.002	<0.0002	<0.0002	
Highest	0.002	<0.002	<0.001	<0.0002	0.004	<0.0002	<0.001	<0.002	<0.0002	<0.0002	
Exceedance (yes/no)	No	N/A	No	N/A	No	N/A	N/A	N/A	N/A	N/A	

Table 8C – Point 27: Wet Weather Bypass Conditions

Monitoring Period	2021				Reason for Missing Data
EPA Point	Point 27, Yena Gap Effluent, Wet Weather Bypass Conditions				
Pollutant	**Oil and Grease (Wet)**	**Phenols (Wet)**	**Total Suspended Solids (Wet)**	**Biochemical oxygen demand (Wet)**	
Unit of Measure	mg/l	mg/l	mg/l	mg/l	
Licence Limit	70	5	100	350	
Monitoring Frequency Required by Licence	Daily during Wet Weather Bypass				
Averaging Period	Grab Sample				
No. Samples Collected	0	0	0	0	Wet Weather Bypass was not used at all during the year.
Lowest	N/A	N/A	N/A	N/A	
Highest	N/A	N/A	N/A	N/A	
Exceedance (yes/no)	No	No	No	No	

Table 9: 2021 Terminal Remediation Project Works - Asbestos Monitoring Results

Location	No. of Samples Collected 2015-19 Period	NSW SafeWork >0.02 Fibres/millilitre of air sampled	NSW Depart Health & Ampol Action Level >0.01 Fibres/millilitre of air sampled (new in 2015)
CLOR Old Landfarm	64	nil	nil
CLOR Retention Basin	56	nil	nil
CLOR C3 Landfarm	9	nil	nil
CLOR Sub 6 area	12	nil	nil
CLOR Pipeway	62	nil	nil
RPIP Soil	72	nil	nil
OLD Lab. (small area)	32	nil	nil
LPG Garden (small area)	20	nil	nil
Concarbon line	12	nil	nil
Main Pipeway near demolished OMC	126	nil	nil
Pipe Track A near Tank 18	124	nil	nil

Notes:

1. Air monitoring carried out by Ampol 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 monitoring data above, the site remains in compliance with EPL 837 set licence limits and the relevant SSD5544 consent conditions of.

2.3.2 Other Historical Monitoring Performance Data (for 2014 – 2019 period)

The following Tables (10; 11A -11D), have been retained in the Annual report to provide historical monitoring data context and associated trends over the life of the project up to the end of the demolition phase.

Table 10: Asbestos Monitoring Results (during 2015-2019 Demolition works)

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

Note: Asbestos monitoring specific to the Demolition phase of the project was cancelled post the completion of ACS clearance of pipeways and the capping of the ACS Cell.

Table 11: Dust Monitoring Results

Table 11A Dust Tracker (Unit used during felling of Refinery structures**)**

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

Table 11B General Demolition Dust Deposition Units (5 pre-determined locations on site)

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

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

Table 11C ASC Cell - Dust Deposition (15 June 2018 to 28 Sept 2019)

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

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

Table 11D Concrete Crushing - Dust Tracker

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

Note: Concreting crushing operations on site ceased 30 August 2018

2.3.3 Terminal 24 Hour Kurnell Community Hotline Analysis

During the reporting period, the 24-Hour Kurnell Community Hotline received eighteen (18) calls. Table 11 shows the breakdown of these calls, based on the category of the complaint.

Complaints are followed up immediately with an investigation into the potential cause of the complaint and corrective actions initiated where required. All investigations are tracking in the Ampol LPS Database to completion of assigned actions. The outcome of the investigation and the actions taken is provided either by a face-to-face meeting or during a phone call to the complainant.

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

Compared to the 2020 reporting period (and earlier), the number of calls regarding shipping noise concerns continued to decrease significantly.

On the other hand, the number of calls regarding odour concerns increased compared to the 2020 reporting period. While it is worth remembering that enquiries regarding perceived odours have dropped from thirty (30) in 2019 to seven (7) in 2020, a total of eleven (11) calls regarding perceived odour concerns were received through the Community Hotline or by the EPA in 2021.

Refer to Section 2.4.1 for details of discussions with NSW EPA, the affected residents and the operational mitigation measures taken to address these odour complaints.

Nevertheless, all 11 enquiries were investigated and the outcome was communicated with the member of the community that called the Community Hotline.

Shipping Noise:

With regards to the reduced number of noise concerns, particularly relating to shipping activities, the shipping noise monitoring program (SoundScience System) described in Section 2.4.2 is clearly delivering benefits to the Kurnell community and the Terminal.

The number of miscellaneous enquires are slightly reduced from the previous reporting period (8 in 2020 & 4 in 2021). The nature of these enquiries ranged in their nature:

- notifying Terminal Operations of activities occurring under the wharf (a BBQ);
- one person wanted to know why a vessel had two funnels:
- a blocked spoon drain outside their property near the Terminal ROW;
- Resident wanting additional gravel laid at the entrance to the Wharf ROW

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

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

Table 12 2021 Community Hotline Monitoring – Nature of Calls

Number of Call Recorded During the Last Twelve Months	
Pollution Complaint Category	Number of Calls
Odour & Air	11
Water	0
Noise	3
Fallout & Waste	0
Miscellaneous	4
Total	18

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

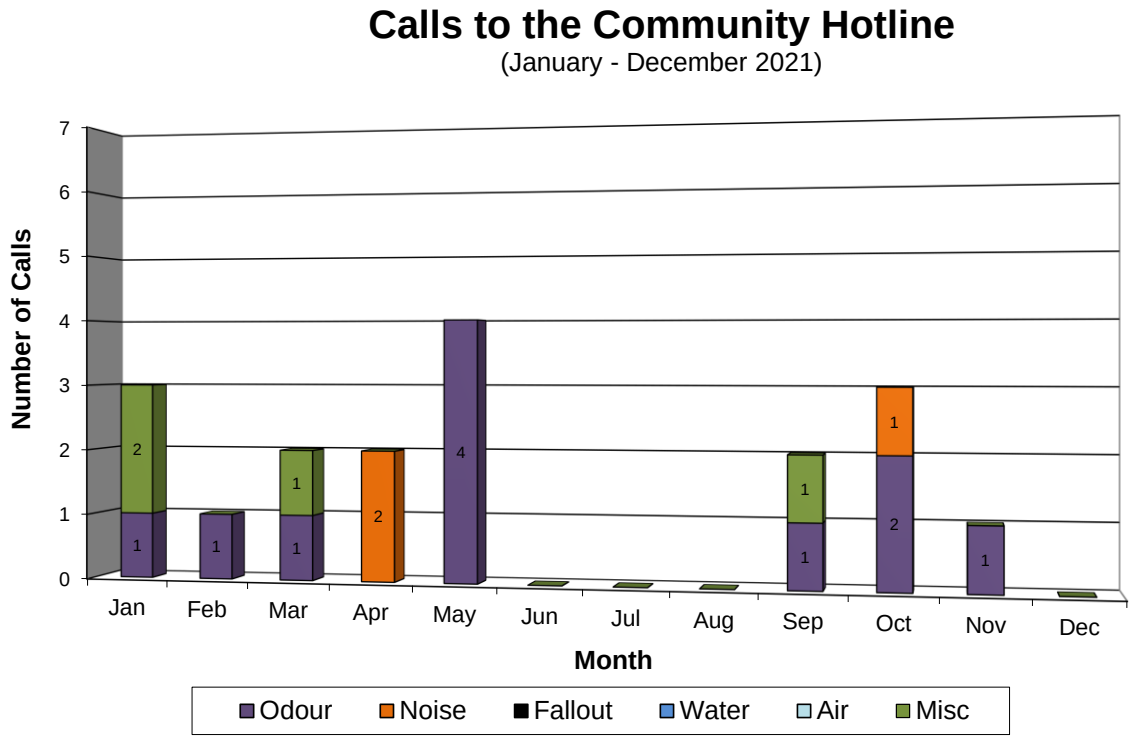

Figure 5 2021 Community Hotline Monitoring – By Month

2.4 TERMINAL ENVIRONMENTAL NON-COMPLIANCE AND CORRECTIVE ACTIONS

Based on the data presented in the previous section, while there were a number of non-conformances, there were no non-compliances with the conditions of consent, specific to the Terminal operations or the EPL limits.

A total of sixty (60) tanker ships were received at the Kurnell Terminal during the 2021 period. Only two (2) tanker ships were identified as having exceeded the Kurnell Terminal EPL837 night-time noise limits during the 2021 period, one of which were associated with a community complaint. This is a excellent result when compared against the number of ships berthed in the 2021 period.

Each exceedance event was investigated and reported to the Ampol Marine Assurance and Vetting teams, in line with the agreed shipping performance process. The DPIE and NSW EPA were also notified via an agreed email proforma.

A summary of the ships reported to the DPIE and NSW EPA are provided in Table 12. This represents a marked improvement on 2020 events when twelve (12) tanker ship exceedances against the Kurnell Terminal EPL837 night-time noise limits were identified and reported to the DPIE and NSW EPA.

As mentioned in the 2020 report, two (2) separate community members called the Kurnell Community Hotline during the daytime period (11:45hrs and 16:00hrs) on 27 Dec 2020 - in relation to a ship called ‘Atlantic Prince’. Both were concerned about an intermittent whistling sound coming from the ship – a sound that they are not familiar with. Terminal Operation Coordinators responded to both calls and advised that a product back loading operation was

underway. They explained the process safety requirements on board for such activities - a pressure relief valve is fitted to tanks to relieve any pressure building in the tank being filled. The intermittent whistling sound occurs when the pressure relief valve is activated. They were advised that the back loading would be completed as promptly as possible and the whistling sound would stop. Both residents appreciated the visit by the Terminal representatives and were satisfied all was well on board the ship. The SoundScience Noise monitoring system confirmed the 'Atlantic Prince' ship remained under the daytime noise limit (38.7 and 42.8 (dBA)) as well as the nigh time limits during its stay at the wharf.

Odour complaints continued to feature in the 2021 Community Hotline data, the majority from residents living near Gate 5 area of the site near the northern Tank bunds. Complaints were generally received during periods of heavy rain and high southerly wind events and/or following Tank "water draw" tasks. Odours will be discussed in more detail in the following Section 1.4.1. Events Reported to Regulators.

There were no other non-compliance events pertaining to Terminal operations reported to Regulators in the 2021 period.

2.4.1 Event Reporting to Regulators

Odour Complaints:

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

A sustained effort has been made on odour control during "at risk" activities such as remediation works during the 2021 period. Despite this, the number of enquiries regarding perceived odours increased from the 2020 reporting period. As stated in 2.3.1, a total of eleven (11) odour complaints were received through the Community Hotline or by the EPA. These complaints came predominantly from a number of community members living closest to Gate 5 and the north Tank bunds. These residents reported noticing odours coming from the site during heavy rain and high southernly winds events, as well as following Tank 'water draws' performed by the Operations team during southerly winds events.

The Terminal Operations Manager and the National Environment Manager, Distribution have worked closely with 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.

To date we have completed a further review of the sewer system around the northern Tank bunds and as such, we have completed the cleaning out of the drains in these bunds and have completed cleaning of the sewer system pits outside these bunds. This will ensure the sewer systems are cleared and flow efficiently to the site's Waste Water Treatment Plant.

We have used an industrial deodoriser in and around the northern Tank bunds to suppress potential odours.

We are continuing to complete 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 review Tank bund floors to ensure rainwater is not trapped within the bunds thus minimising the potential for odours to be generated.

We have also updated our 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 and thus does not have the potential to generate odours.

With the aim of keeping the affected community members, as well as the wider Kurnell community updated on the efforts made, the following communications occurred during the year:

- An initial letterbox drop Letter to the affected residents, explaining the outcome of site investigations and the agreed mitigation plan to ensure offensive odours do not leave the site.
- In lieu of the usual 'face to face' Kurnell Terminal Community meeting, an initial Kurnell Community Newsletter was sent out on 11 August with two follow up Newsletters sent in October and December 2021

The NSW EPA were sent both the letterbox drop letter and all three Newsletters. The Terminal Operation Manager remains in regular contact with the NSW EPA to report on the progress of the mitigation plan and to report any new odour complaints.

<u>Shipping Noise Exceedances:</u>

In relations to Terminal operations, two (2) tanker ship noise level exceedances against the Kurnell Terminal EPL837 night-time noise limits were identified during the 2021 period and reported to the NSW EPA and DPIE, in line with the agreed process.

Additionally, one (1) tanker ship was subject to two (2) community hotline calls in late December 2020 period, despite the ship not exceeding the night-time noise limits identified. As result of the intersection of the 2020 Xmas and New year period, the two (2) community calls were not reported to the NSW EPA and DPIE until 7 January 2021 - as a for 'your information only" measure by the Terminal Operations Manager upon his return from leave.

Details of these shipping events and the corrective/preventative actions taken are summarised in Table 13

Similarly, D6 of SSD5544 only require reporting to the DPIE in cases where an incident has *actual or potential significant off-site impacts* on people, or the biophysical environment associated with the development. No such reporting was required in the 2021 period.

2.4.2 SoundScience 'Smartadata' Unattended Continuous Noise Monitoring System - Kurnell Wharf

As mentioned in Section 2.3.1, noise was previously reported as the second highest potential impact on the community. In particular, members of the community complained mainly about noise generated by the tanker ships during product discharge activities at the wharf.

The SoundScience noise monitoring system continues to be a critical component in the management of shipping noise and is a permanent operational tool for the Shore Officers (SO) at the Wharf. A sustained reduction in the number of ship exceeding the night-time noise limits (2 versus 12 in 2020) has been achieved along with the small number of number of community complaints (2 for one event versus 3 in 2020) relating to shipping noise in 2021.

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

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

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

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

1. During initial ship vetting, the ship representative is informed of the Kurnell Terminal ELP noise level limitations and of the requirement to submit a ship specific noise reduction/ control plan.

2. The noise reduction/ control plan is supplied to Kurnell Terminal Shipping Specialist by the Marine Assurance Specialist to confirm if acceptable.

3. If noise level limits are exceeded during the Kurnell ship berthing event, the ship agent/owner is asked to investigate and confirm what additional noise mitigation measures will be employed to ensure compliance should the ship be chartered for Kurnell again. The noise reduction/control plan must be resubmitted (while Ampol

Vetting cannot compel ship representative to engage the services of a noise engineer, they may decide to do this).

4. Any additional noise mitigation measures are shared with Kurnell Terminal Shipping Specialist to confirm if acceptable.

5. If the ship exceeds the EPL noise level limit on the subsequent chartering event, the ship is deemed unacceptable to return and removed from the Chartering Approval List for Kurnell. There may be occasions which this position may be reviewed in conjunction with Ampol Marine Assurance and Vetting teams and the Terminal. To initiate this review, the ship agent/owner would need to supply/provide substantial evidence that actions have been taken to correct or mitigate the ship's operational noise output.

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

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

The details of the shipping noise exceedences and a summary of the actions taken can be found in Table 12 below.

Shipping Noise Level Exceedances

As stated previously, two (2) tanker ship noise level exceedances against the Kurnell Terminal EPL837 night-time noise limits were identified during the 2021 period and reported to the NSW EPA and DPIE, in line with the agreed process.

Additionally, one (1) tanker ship was subject to two (2) community hotline complaints in late December 2020 period, despite the ship not exceeding the night-time noise limits identified. The DPIE and NSW EPA were informed of these complaints on 7 January 2021 when the Terminal Operations Manager returned from Xmas leave.

Details of these events and corrective/preventative actions taken are summarised in Table 13 below:

Table 12 - Summary of 2021 Non-Compliances

Terminal Operations - Shipping Noise Exceedances Reported against the Kurnell Terminal EPL837 Night-time Noise Limits			
Date	**Description of Non-Compliance**	**Cause of Non-Compliance**	**Corrective/Preventative Action/s**
January 2021 **Report Only**	**Community Complaints ONLY –** **NIL** Tanker ship exceedance against the Kurnell Terminal EPL837 night-time noise limits – 27 Dec 2020 **Note**: Although the event occurred in December 2020, it was reported to DPIE and EPA on **7 Jan 2021** when the Terminal Ops Manager returned from AL. as community complaint only	**Two** Community Hotline Complaints received on 27 December 2020 at 11:45hrs and 16:00hrs	SO responded to community members and advised that to noises they were hearing were associated with backloading activities. Residents reported to be happy with response.

April 2021	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits. **Note**: was reported to DPIE and EPA on 19 April 2021	**Two** Community Hotline Complaints received on 07 April at 23:55hrs and 08 April at 12:05hr Ship named Timberwolf reported to have exceeded the EPL837 night-time noise limits at 18:00hrs on 07 April 2020	• Pumping rates reduced with effect • Captain instructed to turn off non-essential equipment • Ampol Marine Assurance / Ampol Ship Vetting notified **NOTE**: First time at KNT Ship Captain initially told SO that they could not turn off an additional equipment or reduce noise output further. Once LOP issued, ship noise output reduced to below night-time limit and stayed there for duration of stay at the berth.
June 2021	Tanker ship/s exceedances against the Kurnell Terminal EPL837 night-time noise limits. **Note**: was reported to DPIE and EPA on 17 June 2021	Ship named LR2 Pioneer reported to have exceeded the EPL837 night-time noise limits at 18:30hrs on 07 June 2020	• Shore officers instructed the ship to reduce pumping from 10 bar to 7 bar at 18:30 on the 07/06 • At 18:50 they reduced the pumping again to 5 bar which resulted in a reduction to below limit. • At 23:30 a LOP was issue to the ship as reducing the discharge pressure at that time did not continue to keep below limit. • Ship now on notice (repeat offender)

Notes:

1. Ship noise EPA Licence limit exceedances events occurring in 2021 have been reported to NSW EPA and DPIE shortly after they occurred (with exception of Atlantic Prince).
2. An “Exceedance Alert” email is sent to NSW EPA and DPIE when a ship noise exceedence event is observed to have occurred.

2.5 2021 TERMINAL DATA TREND ANALYSIS

As stated in the above section, there were two (2) tanker ship exceedances against the Kurnell Terminal EPL837 night-time noise limits identified and reported to the DPIE and EPA in 2021– refer to Table 12 for details. One (1) event involved two community noise complaints being made. This represents a marked improvement in both the selection of chart tanker ships by Ampol Marine Assurance and surveillance of ships berthed at the Kurnell wharf by the Ampol Shore Officers.

There were 11 odour complaints made, particularly from residents near the northern Tank bund area near Gate 5.

Even though there is a noticeable increase in odour complaints during 2021, the number of calls to the Community Hotline shows a sustained downwards trend both during and following the successful conversion of the refinery to the finished product Terminal.

No other non-compliance events pertaining to Terminal operations were reported in the 2021 period.

Analysis of the available data show continued sound operation of the Terminal within licence and SSD5544 consent requirements, other than the two shipping noise level exceedances and continued odour complaints. Leaving aside the continued reporting of odour complaints, 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 2021 ISO14001:2015 Surveillance Visits One (February) and Two (November) audit reports (LRQA) and the NSW EPA Annual Return.

Despite the restrictions imposed by COVID 19, communication and community engagement efforts continued via letterbox drops (where needed) and Community Newsletters and the Kurnell Community Facebook.

The environmental stewardship processes embedded under the Ampol OEMS Element 13:EMS ensured that relevant monitoring data is generated, assessed and reported in accordance with D9 of SSD5544 and EPL837. This also allows for any potential gaps to be identified early with corrective and preventative action plans being developed and implemented.

The following Table 13 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 13 – 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 (2014-2021 period) Monitoring Programs Compliance/ Incidents/Other**
Soil and Groundwater	**Conversion and Demolition**: • Disturbance of contaminated lands or groundwater • Spills/losses from construction equipment • Loss to ground and groundwater during tank cleanout/demolition **Operations**: • Disturbance of contaminated lands or groundwater • Oily water System overflow • Spills/losses from maintenance equipment/works • Pipeline (above/below) integrity/losses during tank to tank transfers • Tank - water draws	Nil GME non-compliances – refer to Table 7A-F for EPL Monitoring Points 15, 16, 28 & 29 Nil Incidents reported
Human Health & Ecological Risk	All Development Stages: • Flora and Fauna • Surface waters -Marton Park Wetlands shallow water bodies and swamy areas • Contaminants of Potential Concern impacting soils (TPH, BTEX, PAH, Phenols, Lead, Asbestos) • Groundwater impacts • Air quality (VOCs, dusts, H2S, NO_x, CO_2)	• Wetlands protected • Pipeway -asbestos impacted soils removed • Ongoing remediation works to assess/quantify/collect and remove COPC from site = reduced potential worker and community exposure • Improved air quality from refinery closure/cleanout/removal • Improved Terminal Tanks (Sleeve installation program) infrastructure

Surface Water and Wastewater	**Conversion and Demolition**: • Disturbance of contaminated lands or groundwater • Spills/losses from construction equipment • Loss to ground and groundwater during tank cleanout/demolition **Operations**: • Disturbance of contaminated lands or groundwater • Oily water System overflow • Spills/losses from maintenance equipment/works • Pipeline (above/below) integrity/losses during tank to tank transfers • WWTP poor operational performance • Potential flooding from stormwater (National Park) ingress to site – overwhelm WWTP, etc.	Nil Monitoring non-compliances Nil Incidents reported 100% WWTP performance against EPL837 requirements – refer to Table 8 for *Monitoring Point 27* Nil offsite flooding over life of the project reporting period (to date)
Noise and Vibration (*Potential impacts on community based sensitive receptors)*	**Conversion and Demolition**: • Compressor and generator use for pneumatic power equipment • Excavator related works • Truck movements off site during demolition works (scrape and other waste removal) • Traffic noise associated with on/off site movements (deliveries; cranes/other mobile equipment; worker cars) • Installation of new plant and tank refurbishments • Felling of large refinery structures **Operations:** • Berthed Tanker Ships (engine room equipment and discharge pumps) -principle source of community noise complaints and EPL night-time noise limits non-compliance • Process operations plant (product and slops pumps; Diesel Additive Injection System; dosing pumps; compressors, fire pump testing; etc.) • Maintenance tasks using power equipment • Reduced traffic noise associated with on/off site movements (deliveries; cranes/other mobile equipment; worker cars)	Nil non-compliance against construction noise limits Environmental noise assessment at end demolition phase (Dec 19) for land based operational noise confirmed compliance to EPL 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 noise monitoring system. Reduction in noise complaints over life of the project reporting period when compared to Refinery period (to date) Reduced traffic movts into and through community Refer to 2.4.2 of this report for further discussion on *SoundScience Noise Monitoring System*.

Air Quality and Odour	**Conversion and Demolition**: • VOCs – tank draining and cleaning; painting • Storage Tank emissions during storage and transfers • Particulate/ (dust) generating works – cutting; grinding; excavation works; truck movements during dry weather; • Combustion emissions- portable equipment • disturbance of asbestos impacted soils • Odour generation – tank draining and cleaning; disturbance of hydrocarbon impacts soils; WWTP- fuel slops, separator pits **Operations (potential emission sources &/or odours)**: • Storage Tanks – fugitive during storage and water draws • Product transfers – fugitive emissions during transfers • Oily Water system venting • Land Farm emissions during remediation/closure works (VOCs) • Combustion of ship fuels during shipping activities	Monitoring Programs – nil non-compliances 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. Installation of Tanks Sleeves well advanced – 3 tanks remaining at end 2021 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 *Odour Reduction and Mitigation Strategy* discussion
Greenhouse Gases (GHG)	**Conversion and Demolition**: • GHG Scope 1 generated from combustion of fuels in construction equipment (compressors, cranes trucks, etc) • GHG Scope 2 – deemed negligible, associated with office electricity use • GHG Scope 3 – construction materials (steel, concrete) **Operations:** • GHG Scope 1 generated from combustion of fuels in operational equipment (compressors, diesel pumps, trucks, excavators, etc.) • GHG Scope 2 – deemed negligible, associated with office electricity use	Considered immaterial against Refinery GHG emissions Significantly reduced against refinery GHG profile

Transport and Access	**Conversion and Demolition**: • Increased construction vehicle movements - 10 vehicle movts per day • Equipment and material deliveries- 10 vehicle movts per day • Additional construction worker numbers (approx. 140) **Operations:** • Reduced no. operations employees and support functions • Reduced maintenance team • Periodic increases of maintenance team during Tank T&I works (short time frames of 8-12 wks.) • Reduced range of construction type vehicles and movts along Captain Cook Drive	Sustained reduction in traffic numbers and movts. over the life of the project Operations: Ave 40 Ampol employees and regular maintenance workers per day Flexible working arrangements (days at home and in office) in place post COVID 19
Waste Management	**Conversion and Demolition (waste streams)**: • Excavated soils – hydrocarbon contaminated; asbestos contaminated, non- contaminated • Metals – surplus from installations, demolished infrastructure, piping; etc. • Concrete – contaminated and non- contaminated • Excavated road base/asphalt – contaminated and clean • Dewatered groundwater - hydrocarbon contaminated; non-contaminated • Used absorbents, oily rags and PPE • General solid wastes – paper/cardboard and putrescible **Operations:** • Excavated soils – hydrocarbon contaminated; asbestos contaminated, non- contaminated (remediation related) • Fuel oils and slops • Garnet grit (Tank surface cleaning) • Used absorbents, oily rags and PPE • Dewatered groundwater - hydrocarbon contaminated; non-contaminated • General solid wastes – paper/cardboard and putrescible	Nil non-compliances for waste storage, tracking and records (assessed via internal audit program and ISO audit sampling) Approved waste transporters and facilities Paper/cardboard and ink cartridge recycling program in place Reduction in waste streams with cessation of refinery operations and volumes of waste generated.

PART 3 – 2021 ENVIRONMENTAL IMPROVEMENT PLAN OUTCOMES AND SUMMARY

This section of the report provides an overview of the environmental improvement works that have been carried out during the reporting period. This includes works carried out as part of the EPL's Pollution Reduction Program, finalisation of the ACS Containment Cell Long Term EMP with re-submission of the Stage 2 Final Kurnell Terminal Final OEMP (including all required Management Sub Plans). An overview of the improvement works planned for 2022 will be provided as well.

3.1 CHANGES MADE TO ENHANCE THE ENVIRONMENTAL PERFORMANCE OF TERMINAL ACTIVITIES.

3.1.1 ACS Containment Cell Long Term Environmental Management Plan (LT EMP)

Following delays in 2020 (Site Auditor requested additional data), the final ACS Containment Cell Long Term Environmental Management Plan (LTEMP) was submitted to the EPA approved Site Auditor and then approved. As a consequence, the LTEMP was then submitted to the DPIE for approval.

All the periodic monitoring and maintenance requirements stipulated in the LTEMP were incorporated into the Ampol Periodic Maintenance Program (SAP) in 2020 and have been independently assessed by the LRQA Auditor against the maintenance requirements during ISO14001:2015 Surveillance Visit 1 in February 2021 and confirmed to be compliant.

3.1.2 Stage 2 Final Kurnell Terminal Operational Environmental Management Plan (OEMP)

Minor administrative amendments were made to Stage 2 Final Kurnell Terminal OEMP and all associated Management Sub Plans in the 2021 reporting period as part of SSD5544 D2, namely:

- Rebranding of Company name from Caltex to Ampol (Logo and references to Caltex in the documents)
- Updating fonts, headers and footers in line with new Ampol Document Management format
- Revised NSW EPA EPL 837 – change in Company name included in the Approvals Appendix C
- Appendix 3 of the Traffic Management Sub Plan (TMSP) was amended to clearly delineate the site's main truck, staff and visitor parking areas.
- Inclusion of the approved LTEMP

In line with the requirements of Obligation D3 of SSD5544, the following Management Sub Plans are now included in the Stage 2 Final Kurnell Terminal OEMP:

- Air Quality Management Sub Plan
- Noise Management Sub Plan
- Waste Management Sub Plan

- Soil and Water Management Sub Plan
- Biodiversity and Weed Management Sub Plan
- Traffic Management Sub Plan
- ACS Containment Cell Long Term Environmental Management Plan (LTEMP)
- Biosecurity Incident Response Management Plan (C'Wealth DAWE requirement for FPOE such as Kurnell Wharf)

As a result of the approved LTEMP being available, the Stage 2 Final Kurnell Terminal OEMP was resubmitted to the DPIE on 7 March 2021 and subsequently approved by the DPIE on 8 April 2021.

The approved ACS Containment Cell Long Term Environmental Management Plan (LTEMP) and the Stage 2 Final Kurnell Terminal OEMP have been posted on the Ampol Public website, in line with the requirements of Obligation D9 of SSD5544. They can be viewed via the following link:

Kurnell Refinery Conversion Project

3.1.3 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 EPL837, Ampol has committed to the installation of emission reducing sleeves or seals on twelve External Floating Roof Tanks (EFRT) in Gasoline service after the transition from a Refinery to a Terminal. The NSW EPA have agreed to a three-part implementation program. Part 1 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 five (5) Tanks.

3.1.4 Independent Environmental Audit (IEA) Outcomes

Independent environmental audits were conducted in April 2016, September 2017 and again in January 2021, in line with the requirements of auditing Obligation D7 of SSD5544 Conversion of Refinery to Finished Product Import and Distribution Terminal.

The DPIE approved deferral of the 2020 IEA (due to COVID 19 restrictions) was carried out during the period 27 January to 11 February 2021. The DPIE approved Auditor (Roberto Toso) report, along with the Ampol response to the one (1) non-conformance, was submitted to the DPIE for review. The Department subsequently informed us that the report generally satisfies the requirements of Schedule D, Condition 7 for the IEA and was approved.

All three IEA reports are posted on the Ampol Public Webpage within the *Sustainability* Section, under *Kurnell Refinery Conversion Project*. The next IEA is due in three (3) years, in line with requirements of Obligation D7 of SSD5544.

Refer to Appendix 1 for the status of the Ampol actions arising from the above mentioned Independent Environmental Audits (IEA).

3.2 2022 PLANNED IMPROVEMENT MEASURES

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

Ampol has committed to the installation of emission reducing sleeves or seals on twelve External Floating Roof Tanks (EFRT) after the transition from a Refinery to a Terminal. The NSW EPA have agreed to an implementation program as referred in Section 3.1.3. During the reporting period the licence requirements for the programme changed from a pollution reduction program (PRP U16.2) to a Special Condition (SC E17). A progress report for SC E17 was submitted to the NSW EPA on 31 October 2021.

A further progress report will be issued before 31 October 2022.

3.2.2 Kurnell Terminal Odour Mitigation Plan

The odour mitigation plan developed in 2021 will be carried over into 2022. In summary, it will include 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 will be conducted during southerly wind events and after rain.
- While Tank water draws are a necessary operational task, the Operations team will endeavour, 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 review Tank bund floors to ensure rainwater is not trapped within the bunds thus minimising the potential for odours to be generated.
- Apply the updated our 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 and thus does not have the potential to generate odours.
- Continued communications and consultation with the affected community members, as well as the wider Kurnell community by providing updated on the efforts made.

The Terminal Operation Manager will remain in regular contact with the NSW EPA to report on the progress of the mitigation plan and to report any new odour complaints.

3.2.3 Kurnell Terminal Remediation Action Strategy

Whilst not within the scope of SSD5544, a Kurnell Terminal Remediation Action Strategy (RAS) has been developed. In line with the NSW EPA expectations, a remediation action plan 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 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 will be successfully remediated by end 2028.

In addition, the following Development Consent/Approvals (DA) have been issued by Sutherland Shire Council (SSC):

- DA20/0779 – Pipeways and Asbestos Areas
- DA20/0204 – CLOR Retention Basin and Process Area
- DA20/0104 – CLOR Landfarm
- DA21/0002 – Continental Carbon Pipe Line

4 SUMMARY

Over the previous year, the Terminal and its associated Tank T&Is and Remediation project works have complied with the Development Consents for Application:

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

The ongoing monitoring program (groundwater, leachate system, leak detection and erosion/sediment) associated with the ASC Containment Cell 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 2021 IEA outcomes and two (2) successful ISO14001:2015 Surveillance Visits 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
1. Site Emergency Response Plan (ERP) Ampol was unable to provide evidence that the updated ERP (referring to Tank demolition works) was submitted to the NSW DPIE, as required by MOD3 - Tank 101 Demolition ***Applicable Consent Condition: C4B*** Mitigating Evidence 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. Specific to Tank 101, an AECOM letter sent to DPIE (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.	Sighted subsequent approvals and associated communications between Ampol and DPIE 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. Continue adherence to sound records management for all Project documents and submissions to third parties, (plans, reports, etc.) by ensuring: **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 **b)** Action sign off/verification includes a check for correct record retention and evidence of submissions made (as required)	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.). There were a number of reporting commitments to DPIE and EPA during the period 4th Qtr. 2017 to March 2020 (when the project concluded) and this single event should be considered as an "outlier". 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. The outcomes of this audit and the recommendations will be communicated to all Fuels and Infrastructure groups.

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)	Caltex (now Ampol) Response	2021 Update and Commentary
1. Odour 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. *Applicable Consent Condition D2 and EPL 837 Condition L7* Not caused by the direct development activities but related to Condition D2 requiring the establishment and implementation of an Operational Environmental Management. Note: Caltex Loss Prevention procedures were followed.	Continue investigations in odour complaints and design odour monitoring programs to determine severity / causes. Most odour investigations are post event, so consider a more pro-active approach to internally recording odours before they become potentially offensive to neighbours.	Caltex accepted the audit team's findings and comments. We will continue investigations into any odour complaints received (internal and external). 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.	Corrective and preventative actions continue to be applied in Terminal and demolition operations.
2. Operational Controls – loss of containment 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) *Applicable Consent Condition D2 and EPL 837 Conditions L1 and O1* Not caused by the direct demolition activities but related to Condition D2 requiring the establishment and implementation of an Operational Environmental Management. Note: Caltex Loss Prevention procedures were followed. Reported to DPIE (Annual Review Report December 2016).	Loss Prevention investigations and subsequent actions were satisfactory.	Caltex accepted the audit team's findings and comments. Gasoline 1 Pipeline: • Checks were completed on all PSV valves to ensure they are operating as intended • All isolating valves for PSVs to be secured open • An internal memorandum (Loss Prevention System Alert) was issued to raise awareness of working around PSVs.	Corrective and preventative actions continue to be applied in Terminal and demolition operations.

Non-Compliance	Auditor Recommendation (Options)	Caltex (now Ampol) Response	2021 Update and Commentary
3. Late Submission of Demolition Studies (prior to commencement of Demolition) The following studies were required to be submitted (for approval) to the Secretary at least one month prior to the commencement of demolition works: Firewater System Review Demolition Safety Study Demolition had started prior to submission and approval. *Applicable Consent Condition C3A*	Sighted subsequent approval and associated communications between Caltex and DPIE Noted that other Plans sampled (including sub-plans) have been submitted and approved within required timeframes. Better diligence demonstrated	Caltex accepted the audit team's findings and comments. As stated by the Auditor, better diligence has been applied to the tracking of Consent Condition requirements, DPIE submission dates and the use of the Caltex action tracking system to demonstrate compliance. The additional consent conditions arising from SSD5544 MOD2 and 3 are tracked in the Caltex action tracking system to demonstrate compliance.	Corrective and preventative actions continue to be applied in Terminal operations.

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	2021 Update and Commentary
1, **Noise Management Plan** Noise monitoring, indicating a high level of Leq > 60, at the boundary (Road 7) on 4th November 2014 was not further investigated / monitored to determine causes and resolution. It was not entered in the Caltex Loss Prevention System (or equivalent). Note: based on evidence sampled, this was an isolated example. Applicable Consent Conditions: C22	Ensure LPS (or equivalent) is used to capture high noise readings to facilitate (and have a record) of cause analysis and reporting to the	Communication of requirements to document all such events in LPS and Lessons Learnt session to Terminal and Demolition Project Team completed. Ensured effective recording and use of LPS for various issues e.g. odour, dust etc.	IEA Team Comments: Sighted communication of requirements and Lessons Learnt session. Sighted effective recording and use of LPS for various issues e.g. odour, dust etc. From environmental data sampled on this audit, no examples sighted where LPS was not used when applicable.	Corrective and preventative actions continue to be applied in Terminal operations and other site based projects.
2. **Air Quality Management Plan** 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. Applicable Consent Condition: C28	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. CEMP and sub-plan audits can be used to verify specified activities are being complied with and records are available to demonstrate it.	Lessons Learnt being carried forward into the demolition works phase. 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.	IEA Team Comments: Sighted evidence of Lessons Learnt being carried forward into the demolition phase. 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.	Corrective and preventative actions continue to be applied in Terminal and other site based projects.

3. Construction Environment Management Plan (CEMP) Audits The CEMP (Jan. 2014) section 4.1 requires the following: • Implementation of the CEMP will be audited by Caltex within 6 weeks of the commencement of site construction works • Contractor will submit copies of completed monthly HSE audits The CEMP audit was not done; only one contractor monthly HSE audit was in evidence. Applicable Consent Condition: D1	Improve prominence of specified CEMP audits and use them as intended. Feature as a critical milestone to be tracked. Establish a better long-term record keeping system for information (e.g. HSE audits) from contractors.	Communication of requirements and Lessons Learnt session to Terminal and Demolition Project Team completed. 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	IEA Team Comments: 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. Contactor audit reports (IDES) were readily available.	Corrective and preventative actions continue to be applied in Terminal and other site based projects.
4. Independent Environmental Audit This IEA was conducted past the approved extension date of October 2015. Applicable Consent Condition: D7	Clarify IEA timeframes with other / future Development Consents.	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 Engaged with DPIE representatives to discuss scope of the next IEA early.	IEA Team Comments: IEAs for SSD 5544 and SSD 5353 back on track with required timeframes.	Corrective and preventative actions continue to be applied in Terminal and other site based projects.

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	**2021 Comments/Actions (where required)**
	SCHEDULE B ADMINISTRATIVE CIONDITIONS				
	OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT				
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	**2021 IEA** Auditor noted NIL breaches
	TERMS OF CONSENT				
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	**2021 IEA** 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, the conditions of this Consent shall prevail to the extent of any inconsistency.	G	Statement	Compliant	Not triggered

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	**2021 IEA** 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	**2021 IEA** Auditor noted Ampol Public webpage up to date
	LIMITS OF CONSENT				
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	**2021 IEA** 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	**2021 Update**: 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	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	**2021 Update:** Ongoing compliance verified during 2021 IEA
	AMENDED ENVIRONMENT PROTECTION LICENCE (EPL) REQUIREMENT				
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	**2021 Update:** SoundScience system updated in March 2021. Continues to be operational aid the Shore Officers during

					shipping berthing and discharge operations
	STRUCTURAL ADEQUACY				
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	**2021 Update:** ACS Cell works completed Ist Qtr. 2020 Demolition phase of the conversion ceased on 31 March 2020
B15	The Applicant shall ensure that all demolition work is carried out in accordance with Australian Standard AS 2601:2001: The Demolition of Structures, or its latest version.	D	Completed	Compliant Assessed in 2017 IEA	**As per Dec 2019 Update:** All demolition works (structures) completed mid 2019
	OPERATION OF PLANT AND EQUIPMENT				
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	**2021 Update:** Ongoing compliance to be verified during 2021 IEA
B16 A	The cooling water outlet pipeline shall be removed from beneath Silver Beach north of Prince Charles Parade and up to 20 metres seaward from the low tide mark in Botany Bay as shown in Appendix A of this consent.	D	Completed	Compliant	**As per Dec 2020 Update:** Refer to MOD5 comments
	PROTECTION OF PUBLIC INFRASTRUCTURE				
B17	Prior to the commencement of construction, the Applicant shall: (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (b) submit a copy of this report to the Secretary and Council.	C	Completed	Compliant Assessed in 2016 and 2017 IEA's	**2021 IEA** Auditor noted NIL breaches

B17 A	Prior to the commencement of demolition works, the Applicant shall: (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and (b) submit a copy of this report to the Secretary and Council.	D/T	Completed	Compliant Assessed in 2017 IEA	**2021 IEA** Auditor noted NIL breaches
B18	The Applicant shall: (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.	G	Active/ongoing	Compliant	Not triggered during the life of the Development
	STAGED SUBMISSION OF PLANS OR PROGRAMS				
B19	With the approval of the Secretary, the Applicant may: (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or (b) combine any strategy, plan or program required by this consent. Notes: 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. There must be a clear relationship between the strategy, plan or program that are to be combined."	G	Active/ongoing	Compliant Assessed in 2016 and 2017 IEA's	Submission of Stage 2 Terminal OEMP & Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020. Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted. Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor. DPIE approved extension of submission date to mid-March 2021 **2021 IEA Auditor** Comments: Latest submission of amended Ampol Kurnell Terminal OEMP

					Final Stage 2 on 7 March sighted. Shown evidence (dated 8 April) confirming DPIE approval of the OEMP and Management Plans – including ACS C/Cell LTEMP
	DISPUTE RESOLUTION				
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	Nil instances during the Development period
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	**2021 IEA** Auditor noted NIL breaches
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	**2021 IEA** Auditor noted NIL breaches
	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	**2021 IEA** Auditor noted NIL breaches

<table>
<tr><td>C1A</td><td>The Applicant shall implement the recommendations in section 6 of the document titled Hazard and Risk Analysis of the proposed Caltex Kurnell Refinery Demolition Works (HRA), prepared by Planager Pty Ltd and enclosed in Appendix B of the SEE.</td><td>G</td><td>Completed</td><td>Compliant</td><td>2021 IEA

Auditor noted NIL breaches</td></tr>
<tr><td></td><td>Demolition</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C1B</td><td>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 Work Health and safety Regulation 2011.</td><td>D</td><td>Completed</td><td>Compliant</td><td>Note comments in “Applicable Phase” column

The relevant regulatory approval requirement has previously been met and assessed as compliant</td></tr>
<tr><td>C1C</td><td>The Applicant shall ensure that major demolition works as defined under the Work Health and safety Regulation 2011 are undertaken by licensed demolition experts.</td><td>D</td><td>Completed</td><td>Compliant</td><td>See above comments</td></tr>
<tr><td></td><td>Commissioning</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C2</td><td>The Applicant shall commission the development in accordance with Table 1 below:

<table><tr><td>System Description</td><td>Estimated Commencement of Commissioning</td><td>Estimated Commencement of Operation of System</td></tr><tr><td>Jet</td><td>1 March 2014</td><td>1 June 2014</td></tr><tr><td>Diesel</td><td>1 April 2014</td><td>1 July 2014</td></tr><tr><td>Gasoline</td><td>1 May 2014</td><td>1 August 2014</td></tr><tr><td>Slop</td><td>1 May 2014</td><td>1 August 2014</td></tr></table></td><td>C</td><td>Completed</td><td>Compliant</td><td>Note comments under “Activity Status” Phase

The relevant regulatory approval requirement has previously been met and assessed as compliant</td></tr>
<tr><td></td><td>Pre-construction</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C3</td><td>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</td><td>C</td><td>Completed</td><td>Compliant

Assessed in 2016 and 2017 IEA’s</td><td>Not triggered

The relevant regulatory approval requirement has previously been met and assessed as compliant</td></tr>
</table>

	the Secretary and, with respect to the Fire Safety Study, approval has also been given by Fire and Rescue NSW. (a) Construction Safety Study 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. (b) Fire Safety Study A Fire Safety Study for the proposed Development. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study shall also be submitted for approval to Fire and Rescue NSW. (c) Hazard and Operability Study 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'. 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. (d) **Final** Hazard Analysis 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.				**As per Dec 2019 Update:** Completed and submitted 4th Qtr. 2019. Subsequent approval by Regulator

	Pre-Demolition				
C3A	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. (a) FIRE WATER SYSTEM REVIEW 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. (b) DEMOLITION SAFETY STUDY 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.	D	Completed	Non-compliant – 2016 IEA (Administrative NC) **Refer to 2016 IEA Report** and comments in Appendix 1, Part 2(a) **Note**: demolition had already started prior to submission and approval, thus non-compliant with the timeframe required; all plans subsequently approved	**2021 Comments:** Subsequent submissions of management plans to DPIE have all been within timeframes
	Pre-commissioning				
C4	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. (a) Emergency Plan 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	G	Completed	Compliant Assessed in 2016 and 2017 IEA's	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant

	Development. The plan shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'. (b) Safety Management System 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 Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'. 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.	G	Completed	Compliant Assessed in 2016 and 2017 IEA's	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant
C4A	No later than one month prior to the commencement of the demolition works, or within such a further period as the Secretary may agree, the Applicant shall submit for the approval of the Secretary an updated Emergency Plan and detailed emergency procedures. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No.1 'Industry Emergency Planning Guidelines' and shall provide information of the emergency arrangements during the demolition works.	D	Completed	Compliant Assessed in 2017 IEA	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant
C5	Prior to the Commencement of commissioning the first asset within each system (see Condition C2), the Applicant shall submit a Pre-Commissioning Plan and Pre-Start-up Safety Review Checklists to the Secretary.	C	Completed	Compliant Assessed in 2016 and 2017 IEA's	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant

	Pre-Start-up				
C6	Pre-Start-up Compliance Report 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: (a) dates of study/plan/system submission, approval, commencement of construction and commissioning; (b) actions taken or proposed, to implement the recommendations and safety-related control measures in the studies/plans/systems; and (c) responses to each requirement imposed by the Secretary under Condition C7 of this consent. 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.	T	Completed	Compliant Assessed in 2016 and 2017 IEA's	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant
	Post-Start-up				
C7	Post-Start-up Compliance Report 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: (a) the Emergency Plan required under Condition C4(a) is effectively in place and that at least one emergency exercise has been conducted; and (b) the Safety Management System required under Condition C4 (b) has been fully implemented and that records required by the system are being kept. The report shall be prepared in consultation with WorkCover NSW.	T	Completed	Compliant Assessed in 2016 and 2017 IEA's	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant

C7A	Fire Safety Study Review 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 *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.'* The study shall also be submitted to NSW Fire and Rescue for approval.	D	Completed	Fire Safety Study Review submitted to DPIE and NSW Fire and Rescue Oct 2019	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant
C8	Hazard Audit Twelve months after all four systems being fully operational and every three years thereafter, or at such intervals as the Secretary may agree, the Applicant shall carry out a comprehensive Hazard Audit of the proposed Development and within one month of each audit submit a report to the Secretary. 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: (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&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.	T	Completed	Compliant 1st Hazard Audit (October 2015) Audit report and proposed actions submitted to DPIE and DPIE Response (Jan. 2016). 2nd Hazard Audit (October 2018) Audit report and proposed actions submitted to DPIE on 15 Oct 2018 Actions tracked in MEET-002465 DPIE Response Letter (15 Nov 2018)	**2021 IEA** confirmed all MEET-002465 actions completed Auditor noted NIL breaches 3rd Hazard Audit conducted by Arriscar via RAM and Site Inspection in October 2021 Report sent to DPIE on 16 November 2021 Agreed 2021 Hazard Audit actions in Cintellate - MEET-007172

	(e) verify implementation of any measures arising from the reports submitted in respect of Conditions C2 to C5 of this consent. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.				
C9	Further Requirements The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Conditions C2 to C8 of this consent inclusive, within such time as the Secretary may agree.	G	Statement	Compliant	
	Fire Risk Management During Demolition				
C9A	The Applicant shall: 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; b) ensure two copies of the emergency procedures detailed in condition a) above are located in demolition areas; c) ensure appropriate first aid firefighting equipment is provided on site; d) ensure that plant operators and demolition contractors are trained to undertake first aid firefighting in the event of an incident; and 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.	D	Completed	Compliant Assessed in 2016 and 2017 IEA's	The Conversion to Terminal project concluded on 31 March 2020.

	SOIL AND WATER				
	Discharge of Water				
C10	The Development shall comply with section 120 of the Protection of the Environment Operations Act 1997, which prohibits the pollution of waters, except as expressly provided in an EPL.	G	Active/ongoing	Compliant	Ongoing compliance verified during 2021 IEA Auditor noted NIL breaches
	Erosion and Sediment Control				
C11	During the construction and demolition works associated with the Development, the Applicant shall implement suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the Managing Urban Stormwater: Soils and Construction Guideline and the relevant Management and Mitigation measures contained within Appendix C of this consent.	T & D	Statement	Compliant	The Conversion to Terminal project concluded on 31 March 2020.
	Imported Soil				
C11 A	The Applicant shall: 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; b) ensure that the material used as backfill for Solver Beach is of similar grain size and colour characteristics; 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 *Protection of the Environment Operations (Waste) Regulation 2014* for use in the Caltex Terminal. 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. e) keep accurate records of the volume and type of fill to be used; and f) make these records available to the Department upon request.	G	Active/ongoing for Terminal operations	Compliant Assessed during 2017 IEA	**2021 Comments:** ACS waste reviewed during 2021 IEA Auditor checked Environmental Waste Log record – refer to report noting NIL breaches

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 *Managing Urban Stormwater: Soils and Construction – Volume 1* and the relevant Management and Mitigation measures contained within Appendix C of this consent.	D	Statement	Compliant	The Conversion to Terminal project concluded on 31 March 2020.
	Water Management Plan				
C12	The Applicant shall prepare and implement a Water Management Plan for the Development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA; (b) be approved by the Secretary (refer to Conditions D1 and D2 for timing); (c) In addition to the standard requirements for management plans (see Condition D3), this plan must include a Surface Water Management Plan, that: · includes a description of the water management system on site, including the: • stormwater system; and, • oily water / wastewater system. • includes plans for the above two components of the systems: • Demonstrates compliance with any requirements of the EPL and/or the EPA.	T & D	Plan Completed & Approved Active/ongoing	Compliant	**2021 update:** Final Stage Two Kurnell OEMP reviewed by DPIE in March 2020 – nil amendments to Management Sub Plans needed, other than changed site map in Traffic Management OEMP not approved at that time as waiting for final Site Auditor approved ACS LTEMP OEMP and Management Sub Plans reviewed during 2021 IEA Latest submission of 2021 amended Ampol Kurnell Terminal OEMP Stage 2 Final on 7 March sighted. Shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Plans – including ACS C/Cell LTEMP
C12 A	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: (a) be submitted to the Secretary for approval (See condition D1A for timing); (b) include a description of soil and water issues associated with the demolition works; (c) include measures for managing soils that are excavated and stockpiled on site including erosion and sediment control measures for stockpiles and disturbed areas; (d) include details of water management and monitoring requirements during demolition works; and	D	Plan Completed & Approved Active/ongoing	Compliant	

	(e) include procedures for corrective action in the event that potential contaminants of concern are identified in the groundwater from the quarterly groundwater monitoring program.				
	Groundwater				
C13	In the event that groundwater is intersected during construction and demolition works the Applicant shall: (a) obtain the necessary water related approvals from NOW; (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.	C, D	Completed	Compliant	Nil such incidents reported
	Acid Sulphate Soils (ASS) Management Plan				
C14	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: (a) be prepared in consultation with the EPA and Council by a suitably qualified and experienced expert; (b) be approved by the Secretary prior to the continuation of any excavation works; (c) outline the investigations that have be undertaken to test for the presence of ASS in accordance the NSW State Government's Acid Sulphate Soils Manual (ASSMAC 1998); (d) detail the protocols to be put in place and followed; (e) detail how the ASS will be tested, handled and stockpiled; (f) detail measures to prevent erosion and sedimentation of ASS; and, if necessary (g) outline how the ASS will be disposed of off-site (e.g. at a licensed facility).	C, D	Completed	Not triggered.	**2021 Update** Nil events involving ASS found during the life of the Development Terminal Soil and Water Management Sub Plan includes section dealing with ASS. DPIE approved OEMP and all 2021 IEA Auditor shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Plans – including Terminal Soil and Water Management Sub Plan

	Contamination Management				
C15	The Applicant shall prepare and implement a Contamination Management Plan for the Development prior to commencement of <u>construction</u>. The Plan shall: (a) be prepared in consultation with the EPA and NSW Health; (b) be to the satisfaction of the Secretary (refer to Condition D1 for timing); (c) outline measures for managing potentially contaminated soil and groundwater, including soil testing, classification, handling, storing and disposal; (d) detail the measures that will be employed to prevent erosion and sedimentation of contaminated soil; (e) detail measures for periodically testing surface water run-off that may accumulate during excavation works for elevated levels of contamination, with any water that is found to have elevated levels of contaminants being disposed of via the on-site Wastewater Treatment Plant. (f) detail measures for managing asbestos encountered during works, including disturbances of soil and release of asbestos into the air; *(g)* outline how contaminated soil and water would be classified and disposed of in accordance with the *Protection of the Environment Operations Act 1997* and associated regulations and characterised in accordance with the *EPA's Waste Classification Guidelines.* 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 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.	C, D	Plan Completed & Approved Completed	Compliant	**2021 Update:** Remediation of affected areas of site included in under Kurnell Remediation Strategy. Works commenced in 2019 and will continue for a number of years. Covered by SSC DA processes Refer to body of this report for 2021 Remediation Action Plan activities.
C15 A	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: a) be submitted to the Secretary for approval (See condition D1A for timing); b) detail measures for the identification and monitoring of potentially contaminated soils and groundwater including the use of excavation visual and olfactory indicators; and	D	Completed	Compliant Assessed in 2017 IEA	Refer to comments in C15 The Conversion to Terminal project concluded on <u>31 March 2020.</u>

<table>
<tr><td></td><td>c) include measures for managing potentially contaminated soils and groundwater during ground disturbance and excavation works.</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Asbestos Management</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C15
B</td><td>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:

a) Work Health and Safety Regulation 2011;
b) Model Code of Practice – How to Manage and Control Asbestos in the Workplace, 2011 Safe Work Australia
c) Model Code of Practice – How to Safely Remove Asbestos, 2011 Safe Work Australia; and
d) Protection of the Environment (Waste) Regulation 2005.</td><td>D</td><td>Completed</td><td>Compliant</td><td>2021 Update:

Reviewed during 2021 IEA

Auditor noted NIL breaches of air monitoring and ACM/ACS waste management</td></tr>
<tr><td></td><td>NOISE AND VIBRATION</td><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Construction Noise Limits</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C16</td><td>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
LA_{eq} (15min)</th><th>Evening
LA_{eq} (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></td><td>C, D</td><td>Completed</td><td>Compliant

Reviewed in 2016 and 2017 IEA</td><td></td></tr>
</table>

<table>
<tr><th></th><th>Operational Noise Limits</th><th></th><th></th><th></th><th></th></tr>
<tr><td>C17</td><td>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 L_{Aeq} (15min)</th><th>Evening L_{Aeq} (15min)</th><th>Night L_{Aeq} (15min)</th><th>Night $L_{A}max$</th></tr>
<tr><td>At any private residential receiver</td><td>60</td><td>50</td><td>50</td><td>55</td></tr>
</table>
Notes:
• To identify a residential receiver location, refer to Appendix F of the EIS
• 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
• 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.</td><td>G</td><td>Active/ongoing</td><td>Compliant for Terminal (Land) and Demolition

Non-Compliant for shipping noise in 2016 IEA</td><td>Refer to previous DPIE Annual Review reports.
No community noise complaints were attributed to demolition activities or land-based Terminal operations – all were allocated to other activities by the Terminal Operations. EPA and DPIE aware of these monitoring results.

Sound Science System remains insitu at the Wharf as a permanent operational tool

Refer to DPIE Annual Review, Section 2.4.2 for commentary on system in 2021
Note: Community complaints reviewed during 2021 IEA</td></tr>
</table>

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

<table>
<tr><td></td><td>Hours of Construction and Operation</td><td></td><td></td><td></td><td></td></tr>
<tr><td>C18</td><td>With exception of the works identified in conditions C19 and C20, the Applicant shall comply with the hours detailed in table 4.

Table 4: Construction, Demolition & Operation Hours

<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></td><td>G</td><td>Active/ongoing</td><td>Compliant.</td><td>The Conversion to Terminal project concluded on 31 March 2020.

Reviewed during 2021 IEA

Auditor noted NIL breaches</td></tr>
<tr><td>C19</td><td>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.</td><td>C & D</td><td>Completed</td><td>Compliant

Assessed in 2016 and 2017 IEA</td><td></td></tr>
<tr><td>C20</td><td>Construction works outside of the work hours identified in condition C18 above may be undertaken in the following circumstances:

(a) works that are inaudible at nearest sensitive land receivers;
(b) works that are consistent with Caltex's existing maintenance procedures and are in accordance with the existing EPL;
(c) works agreed to in writing by the EPA or the Department;
(d) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
(e) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.</td><td>C & D</td><td>Completed</td><td>Compliant</td><td>The Conversion to Terminal project concluded on 31 March 2020.

Reviewed during 2021 IEA

Auditor noted NIL breaches</td></tr>
</table>

	Operating Conditions				
C21	The Applicant shall: (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; (b) minimise the noise impacts of the development during adverse meteorological conditions when noise criteria do not apply; (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 **(d)** regularly assess noise monitoring data and relocate, modify and/or stop operations to ensure compliance with the relevant conditions of this consent.	T	Active/ongoing	Compliant	**2021 Update:** 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 2021 IEA review of community complaints 2 x shipping noise exceedences report to DPIE and EPA Auditor noted NIL other breaches
Commentary on Dec 2019: Environmental Noise Survey: Wilkinson Murray was engaged again to undertake residential noise monitoring undertake a noise monitoring survey to redetermine baseline ambient noise levels following the completion of the demolition works and ACS Cell capping at the Caltex Kurnell Site. Long-term unattended monitoring using environmental noise loggers was undertaken at eight locations surrounding the Caltex Kurnell site. Wilkinson Murray concluded that Caltex site activities had no discernible influence on the measured noise levels at the identified monitoring locations.					

	Noise Management Plan				
C22	The Applicant shall prepare and implement a Noise Management Plan for construction works and site operations. The plan (s) shall: (a) be prepared and implemented by a suitably qualified and experienced person, in consultation with the EPA; (b) be approved by the Secretary (refer to Conditions D1 and D2 for timing); (c) describe the measures that will be implemented to minimise noise from the construction and operation of the development including: · all reasonable and feasible measures being employed on site; · maintain equipment to ensure that it is in good order; · traffic noise is effectively managed; and · the noise impacts of the development are minimised during any meteorological conditions when the noise criteria in this consent do not apply; · 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; · compliance with the relevant conditions of this consent. (d) includes a noise monitoring program that: · shall be carried out until otherwise agreed to in writing by the Secretary; · is capable of evaluating the performance of the Development; and · includes a protocol for determining exceedances of the relevant conditions of this consent and responding to complaints.	C & T	Plan Completed & Approved Active/ongoing for Terminal operations	Compliant for Plan but non-compliant for recording one event in 2016 IEA. .	**2021 Update:** Site wide approach to noise management with special measure in place for shipping noise. All maintenance and demolition work covered by PTW requirements. Both Demolition and the Terminal Noise Management Plans have been approved by DPIE Terminal Noise Mgmt. Plan further amended at the end of the shipping noise trial to incorporate identified process improvements. DPIE approved the plan in Feb 2019. Further refinements post the end of Demolition phase. **2021 IEA** Auditor shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Plans – including Noise Management Sub Plan

C22 A	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: a) be approved by the Secretary (refer to conditions D1A and D2 for timing); b) outline the procedures for the notification of all potentially affected persons at least one week prior to and during high noise generating works; c) implement reasonable and feasible noise and vibration management and mitigation measures during demolition activities within the Caltex Terminal; 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 e) include strategies for monitoring vibration impacts on buildings with medium to high heritage significance proposed to be retained within the Caltex Terminal. f)	D	Plan Completed & Approved	Compliant Assessed in 2016 and 2017 IEA	The Conversion to Terminal project concluded on 31 March 2020.
	Construction Vibration				
C23	The Applicant shall aim to achieve the following construction and demolition vibration goals: (a) for structural damage, the vibration limits set out in the *German Standard DIN 4150-3: Structural Vibration - effects of vibration on structures*; and (b) (b) for human exposure, the acceptable vibration values set out in the *Environmental Noise Management Assessing Vibration: A Technical Guideline (Department of Environment and Conservation, 2006*).	C & 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 construction works and demolition works.	C & D	Completed	Compliant	The Conversion to Terminal project concluded on 31 March 2020.
C25	During construction and demolition works, the Applicant shall ensure that: (a) all trucks entering or leaving the site have their loads covered; (b) trucks associated with the Development do not track dirt onto the public road network; and (c) any dirt on public roads as a result of the development is promptly removed.	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	Refer to 2021 DPIE Annual Review for discussion on reported odour complaints and previous DPIE reports Complaints data reviewed during 2021 IEA
	Operating Conditions				
C27	The Applicant shall: (a) implement all reasonable and feasible dust and odour mitigation measures to prevent and minimise odour and dust emissions from operations; (b) prevent and minimise the air quality impacts of the development during adverse meteorological conditions and extraordinary events; (c) minimise any visible off-site air pollution; and **(d)** minimise surface disturbance of the site, other than as permitted under this consent.	G	Active/ongoing	Compliant	Reviewed during 2021 IEA – refer to auditor comments regards terminal and Remediation project air quality and mitigation plans

	Air Quality Management Plan				
C28	The Applicant shall prepare and implement an Air Quality Management Plan for the proposed <u>construction</u> works. The plan shall: (a) be prepared and implemented by a suitably qualified and experienced expert in consultation with the EPA and NSW Health; (b) be approved by the Secretary (refer to Condition D1 for timing); (c) describe the measures that would be implemented on site to ensure: i. the control of air quality and odour impacts of the Development; ii. that these controls remain effective over time; iii. that all reasonable and feasible air quality management practices is employed; iv. the air quality impacts are minimised during adverse meteorological conditions and extraordinary events; and v. compliance with the relevant conditions of this consent. (d) describes the air quality & odour management system; (e) includes an air quality monitoring program that: i. is capable of evaluating the performance of the proposal; ii. includes a protocol for determining any exceedances of the relevant conditions of consent and responding to complaints; iii. adequately supports the air quality management system; and iv. evaluates and reports on the effectiveness of the air quality management system.	C	Plan Completed & Approved Completed	Compliant for Conversion works and Terminals Compliant Assessed in 2016 and 2017 IEA	**2021 Update:** Reviewed during 2021 IEA Latest submission of 2021 amended Ampol Kurnell Terminal Stage 2 Final OEMP on 7 March sighted. 2021 IEA Auditor Shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Plans – including Air Quality Management Sub Plans
28A	The Applicant shall update and implement the Air Quality Management Plan for the <u>demolition works</u> to the satisfaction of the Secretary. This plan is to update the plan approved under condition C28 and shall also: (a) be approved by the Secretary (refer to conditions D1a and D2 for timing); (b) outline procedures for VOC, odour and dust deposition monitoring and suppression methods during excavation works and where potential hydrocarbon contamination is present; and (c) include dust suppression measures and procedures for dust monitoring during operation of the concrete crusher.	D	Plan Completed & Approved Active/ongoing	Compliant Identified as a low risk Non-Compliance in 2016 IEA Demolition Air Quality Management Plan was subsequently approved by DPIE and verified by IEA Auditor in 2017.	**2021 Update:** 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 DPIE. Plan posted to Ampol Public website.

					The Conversion to Terminal project concluded on 31 March 2020.
	Air Quality Verification				
C29	The Applicant shall carry out an air quality verification study for the development. The study shall: (a) be prepared by a suitably qualified expert; (b) be completed within 24 months of the commencement of operations or as otherwise agreed to by the Secretary; (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; (d) include a validation of the accuracy of the modelling predictions in the EIS; (e) verify that compliance with any limits or conditions in the EPL are achieved; (f) verify, using reasonable means, the effectiveness of any emission control measures that have been implemented to minimise air quality impacts; and (g) demonstrate compliance with the relevant regulatory criteria.	T	Completed	Compliant	**As per 2019 Update**: The Air Quality Verification Study was submitted to DPIE in Jan 2019 **Note**: Study reviewed during 2021 IEA
	HERITAGE MANAGEMENT				
	Archival Record				
C30	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). 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.	C	Completed Assessed in 2016 and 2017 IEA's EA	Compliant Further changes to the approved Heritage Strategy – DPIE notified 26 Jul 18 Amended report sent 27 Aug 18	Note: Caltex Kurnell Refinery History book reviewed by auditor during 2021 IEA
	Heritage Management Strategy				

C31	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: (a) be prepared by a suitably qualified person in consultation with Council and the Heritage Council of NSW; (b) be submitted to the Secretary for approval at least 2 months prior to the shut-down of the refinery plant; (c) review the heritage significance of the Australian Oil Refinery site; and (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.	C	Completed Verified/Completed Assessed in 2016 and 2017 IEA	Compliant Assessed in 2016 and 2017 IEA Refer to above comments	Note comments under "Activity Status" Phase The relevant regulatory approval requirement has previously been met and assessed as compliant
31A	The Applicant shall: (a) continue to implement the Heritage Management Strategy prior to and during the demolition works; and (b) implement the recommendations stated in Chapter 4 and 5 of the document titled: *Caltex Kurnell Refinery Demolition: Heritage Impact Statement by Australian Museum Consulting for URS Australia Pty Ltd, October 2014.*	D	Completed	Compliant	**2021 IEA** Auditor noted NIL breaches
	Other Heritage Management and Mitigation Measures				
32	The Applicant shall, prior to shut-down of the refinery: (a) form an in- house team to manage documentation and interpretation of the history of the refinery, including the production of a colour book; (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 (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.	C	Completed	Compliant Assessed in 2016 IEA	**2021 IEA** Auditor noted NIL breaches
32A	Within two months of its scheduled demolition, the Applicant shall undertake a final review of the adaptive reuse capabilities of highly significant buildings which are proposed to be demolished as per the recommendations of the Heritage Management Strategy.	D	Completed	Compliant	There were 7 buildings identified in this category (Demolition Heritage Impact Assessment pg. 105).

32B	Within two months of its scheduled demolition, the Applicant shall complete appropriate archival records of items to be demolished as per the recommendations of the Heritage Management Strategy and other initiatives supported by the Heritage Division of the OEH.	D	Completed	Compliant	**As per 2018 Update:** 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	
	Potential for Discovery of Aboriginal and Non-Aboriginal Heritage Objects				
C33	If during the course of construction and demolition the Applicant becomes aware of any previously unidentified heritage object(s), all work likely to affect the object(s) shall cease immediately and the Heritage Council of New South Wales shall be notified immediately in accordance with section 146 of the Heritage Act 1977. Relevant works shall not recommence until written authorisation from the Heritage Council of NSW is received by the Applicant.	C & D	Completed	Compliant	**2021 Update:** 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 construction and demolition the Applicant becomes aware of any previously unidentified Aboriginal object(s), all work likely to affect the object(s) shall cease immediately and the OEH informed in accordance with section 89A of the National Parks and Wildlife Act 1974. Relevant works shall not recommence until written authorisation from OEH is received by the Applicant.	C & D	Completed	Compliant	

	Energy Efficiency And Greenhouse Gas Emission				
	Managing Energy Efficiency & Greenhouse Gas Emissions				
C35	The Applicant shall implement all reasonable and feasible measures to minimise: (a) energy use; and (b) greenhouse gas emissions, throughout the life of the development, to the satisfaction of the Secretary.	G	Active/ongoing	Compliant Assessed in 2016 and 2017 IEA	Not triggered The relevant regulatory approval requirement has previously been met and assessed as compliant
	TRANSPORT AND ACCESS				
	Traffic Management Plan				
C36	The Applicant shall prepare and implement a Traffic Management Plan for the Development, 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	Compliant Assessed in 2016 and 2017 IEA	**2021 Update:** The Conversion to Terminal project concluded on 31 March 2020. 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 DPIE approval of the OEMP and all Management Plans – including Traffic Management Sub Plan

	· drivers adhere to the code of conduct; and · compliance with the relevant conditions of this consent. (h) include a program to monitor the effectiveness of these measures; and **(i)** (i) if necessary, detail procedures for notifying residents and the community (including local schools), of any potential disruptions to routes.				
C36 A	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: (a) be prepared in consultation with Council; (b) be approved by the Secretary (refer to conditions D1A for timing); (c) include the designated routes for demolition traffic to the demolition areas within the site; (d) include details of traffic management arrangements for the cooling water outlet and intake pipeline removal works within the road reserves; and (e) outline the procedures for the notification of all potentially affected persons prior to and during the pipeline removal works within the road reserves.	D	Completed	Compliant Compliant Assessed in 2017 IEA	
C36 B	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.	D	Completed	Compliant	These works were completed in 2019 with NIL incidents
	Car Parking				
C37	The Applicant shall provide sufficient parking facilities on-site for construction, demolition and operational personnel, and heavy vehicles, to ensure that construction and operational traffic associated with the Development do not utilise public and residential streets or public parking facilities for parking.	G	Active/ongoing	Compliant	Refer to comments in C36

C37 A	Within 18 months after commencement of the demolition works, the Applicant shall: (a) complete a review, in consultation with Council, of the Cook Street approach to the Caltex Terminal site considering issues relating to signage, car parking arrangements, vehicle flows and the future of the weighbridge; and (b) include a timetable of implementation of the findings of this review. Note: The implementations of the findings of this review may require further approval under the EP&A Act.	D	Completed	Not triggered	Refer to comments in C36
	WASTE MANAGEMENT				
	Waste Management On-Site				
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	**2021 Update:** 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 DPIE approval of the OEMP and all Management Plans – including Waste Management Sub Plan
C39	The Applicant shall ensure that any waste generated on the site during construction and demolition 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 31 March 2020. Waste records reviewed during 2021 IEA Auditor noted NIL breaches
C39 A	The Applicant shall ensure that all hazardous materials identified in the structures to be demolished are removed prior to demolition where it is safe and practical to do so.	D	Completed	Compliant Assessed in 2016 and 2017 IEA	

C39 B	The Applicant shall ensure that the reuse of any materials (including soil, scrap metal or building materials) on site must be fit for purpose and must not result in any adverse impacts to the environment.	D	Completed	Compliant – concreted deemed to be uncontaminated crushed and used on site in cleared areas	
C39 C	Where it is safe and practical to do so, the Applicant should as far as practicable sort all waste materials generated during demolition works to maximise opportunities for the beneficial reuse and recycling of such waste materials.	D	Completed	Compliant	The Conversion to Terminal project concluded on 31 March 2020.
	Waste Management Plan				
C40	The Applicant shall prepare and implement a Waste Management Plan for the development to the satisfaction of the Secretary. This Plan shall: (a) be prepared in consultation with the EPA; (b) be approved by the Secretary (refer to timing in Conditions D1 and D2) (c) detail the type and quantity of waste to be generated by construction and operational phases of the development; (d) detail the materials to be reused or recycled, either on or off site; and (e) detail the procedures for handling, storage, collection of recycling and disposal of waste."	G	Plan Completed & Approved Active/ongoing	Compliant	**2021 Update:** 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 DPIE approval of the OEMP and all Management Plans – including Waste Management Sub Plan
	Demolition Waste and Resource Management Plan				
C40 A	The Applicant shall prepare and implement a Demolition Waste and Resource Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to update the plan approved under condition C40 and shall also: (a) be prepared in consultation with the EPA; (b) be approved by the Secretary (refer to condition D1a for timing); (c) outline the measures for the removal, storage and disposal of all waste materials generated during the demolition works; and (d) outline the waste reuse and recovery strategy for the demolition works.	D	Plan Completed & Approved	Compliant	See above comments Project ended 31 March 2020

	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 Caulerpa taxifolia.	D	Completed	Compliant	**As per 2018 Update**: Outlet line successfully removed with nil observable environmental effect The Conversion to Terminal project concluded on 31 March 2020.
	BIODIVERSITY & ECOLOGY				
	Biodiversity Management Plan				
C42	The Applicant shall prepare and implement a Biodiversity Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with the EPA; (b) be approved by the Secretary (refer to Conditions D1 and D2 for timing);; (c) include measures to be taken to minimise impacts on flora and fauna; (d) include a program with timeframes for implementation of the relevant recommendations contained in the Ecology Impact Assessment in Appendix I of the EIS, and the Management and Mitigation Measures contained in Chapter 19 of the EIS to minimise impacts on flora and fauna and maintain the biodiversity value of the site and surrounding environment.	G	Plan Completed & Approved	Compliant	**2021 Update:** 2021 IEA Auditor shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Plans – including Biodiversity and Weed Management Sub Plan

	Pest, Vermin & Noxious Weed Management				
C43	The Applicant shall: (a) implement suitable measures to manage pests, vermin and declared noxious weeds on site; (b) measures to be taken to prevent the spread of any identified noxious/exotic weeds off site; and (c) inspect the site on a regular basis to ensure that these measures are working effectively, and that pests, vermin or noxious weeds are not present on site in sufficient numbers to pose an environmental hazard or cause the loss of amenity in surrounding area. *Note: For the purposes of this condition, noxious weeds are those species subject to an order declared under the Noxious Weed Act 1993.*	G	Active/ongoing	Compliant	As per above comments Biodiversity and Weed Management Sub Plan reviewed during 2021 IEA
C43 A	The Applicant shall update and implement the Biodiversity and Weed Management Plan for the demolition works to the satisfaction of the Secretary. This plan is to consolidate the plans approved under conditions C42 and C43 and shall also: (a) be prepared in consultation with the OEH; (b) be approved by the Secretary (Refer to condition D1A for timing); and NSW Government 9 Department of Planning and Environment (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.	G	Plan Completed & Approved	Compliant	**2021 Update:** Reviewed during 2021 IEA Auditor noted NIL breaches DPIE approval of the OEMP and all Management Plans – including Biodiversity and Weed Management Sub Plan
	Continental Carbon Pipeline				
C43 B	Within three months after the removal of the Continental Carbon Pipeline, the Applicant shall prepare a strategy, in consultation with the OEH, for the active management of the former pipeline route including a program for weed management and removal as outlined in Management and Mitigation Measure K6 in Appendix C of this consent. The Applicant shall have commenced implementation of this strategy six months after the removal of the Continental Carbon Pipeline.	D	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	The Applicant shall prepare and implement a Cooling Water Outlet Management Plan for the demolition works. The plan must: (a) be prepared in consultation with Council; (b) be approved by the Secretary (see condition D1A for timing); (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; (d) outline the measures to be taken to minimise potential marine ecology impacts including measures to: • minimise sediment plumes particularly during backfilling activities; • minimise the potential for hydrocarbon contamination from the pipeline; • minimise disturbance and impact on any seagrass communities; and • maintain machinery and equipment; and • exclude people and animals from the works both landward and seaward; (e) include details of the odour suppression measures during the pipeline removal works; and (f) include details of the works on Silver Beach including: • measures to minimise impacts to the affected sand dunes on Silver Beach including dune erosion and damage to vegetation; and • strategies for stabilising and restoring the affected sand dunes including exclusion measures and revegetation strategies.	D	Completed	Compliant	**As per 2018 Update**: Stage 2 Cooling Water Outlet Management Plan approved Cooling Water Outlet line successfully removed with nil observable environmental effect SSC provided favourable feedback on execution of Plan and the restoration works completed. The Conversion to Terminal project concluded on 31 March 2020.
	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	**As per previous updates:** DA surrendered (March 2016).

	VISUAL				
	Lighting				
C45	The Applicant shall ensure that the lighting associated with the development: (a) complies with the latest version of AS 4282(INT) – *Control of Obtrusive Effects of Outdoor Lighting*; 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	**2021 Update:** 2021 IEA: Auditor noted NIL breaches
	Signage and Fencing				
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	**2021 Update:** 2021 IEA: Auditor noted NIL breaches
	SITE SECURITY				
	Site Security				
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	**2021 Update:** 2021 IEA: Auditor noted NIL breaches

	SCHEDULE D ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING				
	Construction Environment Management Plan				
D1	The Applicant shall prepare and implement a Construction Environmental Management Plan for the Development to the satisfaction of the Secretary. The Plan must: (a) be prepared in consultation with Sutherland Shire Council and the EPA; (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; (c) identify the statutory Consents that apply to the Development; (d) consolidate all relevant management plans and monitoring programs required in the conditions of this Consent; (e) outline all environmental management practices and procedures to be followed during construction and demolition works associated with the Development; (f) describe all activities to be undertaken on the site during construction of the Development, including a clear indication of construction stages; (g) incorporate all relevant management and mitigation measures contained in the EIS and RTS; (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: (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; (ii) Biodiversity and Weed management; (iii) Soils and Erosion management; (iv) Contamination management; (v) Noise and Vibration management; vi) Air Quality management; (vii) Stormwater and Wastewater management; (viii) Traffic management;	C	Plan Completed & Approved	Non- Compliant against (h) in 2016 IEA Identified as an Administrative Non-Compliance in 2016 IEA Completion of corrective actions assessed in 2017 IEA DPIE Approved Construction EMP and Management Plans available on Ampol Public website	**2021 Comments:**: Conversion works completed in 2016 Note comments under "Activity Status" Phase The relevant regulatory approval requirement has previously been met and assessed as compliant

	(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); (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. 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 Construction of the development shall not commence until written consent of this plan has been received from the Secretary.				

	Demolition Environmental Management Plan				
D1A	The Applicant shall prepare and implement a Demolition Environmental Management Plan for the demolition works to the satisfaction of the Secretary. This plan must: (a) be prepared in consultation with Council, EPA and NSW Health; (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; (c) identify the statutory approvals and consents that apply to the development; NSW Government 10 Department of Planning and Environment (d) consolidate all relevant management plans and monitoring programs required in the conditions of this Consent; (e) outline all environmental management practices and procedures to be followed during demolition works associated with the development; (f) describe all activities to be undertaken on the site during demolition works associated with the development, including a clear indication of demolition stages; (g) incorporate all relevant management and mitigation measures contained in the SEE; (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: i. Biodiversity and weed management (See Condition C43A); ii. Soils and water management (See Condition C12A); iii. Contamination management (See Condition C15A); iv. Noise and vibration management (See Condition C22A); v. Air quality management (See Condition C28A); vi. Stormwater and wastewater management (See Condition C12A); vii. Traffic management (See Condition C36A); viii. Demolition waste and resource management (See Condition C40A); ix. Groundwater management, including measures which are consistent with the relevant Management and Mitigation Measures contained in Appendix C of this consent; x. Acid sulphate soils management (See Condition C14); xi. Heritage management strategy (See Condition C31);	D	Plan Completed & Approved	Compliant Assessed in 2017 IEA DPIE Approved Demolition and Management Plans available on Ampol Public website	**As per 2018 Update**: Plan reviewed to account for the new ACS Containment Cell. Plan submitted to DPIE and approved along with other Plans impacted by MOD2 **2021 Update:** Compliance during demolition phase assessed during 2021 IEA Note comments under “Activity Status” Phase The relevant regulatory approval requirement has previously been met and assessed as compliant Auditor noted NIL breaches

	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). (i) describe the roles and responsibilities for all relevant employees involved in the demolition works associated with the Development; (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; (k) include a complaints handling procedure; 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 issues that may arise over the life of the development. The approval of a Demolition Environmental Management Plan 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. Demolition works shall not commence until written approval of this plan has been received from the Secretary.				

	Operational Environmental Management Plan				
D2	The Applicant shall prepare and implement an Operational Environmental Management Plan for the project to the satisfaction of the Secretary. This Plan must: (a) be approved by the Secretary prior to the completion of the Development; (b) provide the strategic framework for environmental management of the project; (c) identify the statutory approvals that apply to the project; (d) include a copy of all relevant management plans and monitoring programs relevant under this consent; (e) outline all environmental management practices and procedures to be followed during operation; (f) describe all activities to be undertaken on the site during operation; (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; (h) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the project; (i) describe the procedures that will be implemented to: · keep the local community and relevant agencies informed about the operation and environmental performance of the project; · receive, handle, respond to, and record complaints; · resolve any disputes that may arise during the course of the project; · respond to any non-compliance; and · respond to emergencies; and (j) include: · copies of any strategies, plans and programs approved under the conditions of this consent; and · a clear plan depicting all the monitoring required to be carried out under the conditions of this consent.	T	Plan Completed & Approved	Compliant Stage One Interim OEMP assessed in 2016 and 2017 IEA	**2021 Update:** **2020 -** Submission of Stage 2 Terminal OEMP & Management Plans (including draft ASC C/Cell LTEMP) submitted Feb 2020. Feedback received from DPIE- minor changes to OEMP but require final (approved) ASC C/Cell LTEMP) submitted before OEMP is approved. Communications with DPIE (P. Copas) re availability of LTEMP due to delays by Site Auditor. DPIE approved extension of submission date to mid-March 2021 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 DPIE approval of the OEMP and all Management Plans

	Management Plan Requirements				
D3	The Applicant shall ensure that the Management Plans required under this consent are prepared in accordance with any relevant guidelines, and include: (a) detailed baseline data; (b) a description of: · the relevant statutory requirements (including any relevant approval, licence or lease conditions); · any relevant limits or performance measures/criteria; and · 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; (c) a description of the measures that will be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; (d) a program to monitor and report on the: · impacts and environmental performance of the development; and · effectiveness of any management measures (see (c) above); (e) a contingency plan to manage any unpredicted impacts and their consequences; (f) a program to investigate and implement ways to improve the environmental performance of the development over time; (g) a protocol for managing and reporting any: · incidents; ·complaints; · non-compliances with statutory requirements; and · exceedances of the impact assessment criteria and/or performance criteria; and (h) a protocol for periodic review of the plan. *Note: The Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*	G	Completed Active/ongoing	Compliant	**2021 Update:** All Management Plan applicable to Terminal operations revised at the end of Demolition works. Submitted as appendices in Final Stage Two Terminal OEMP. Draft ACS C/Cell LTEMP submitted with Terminal OEMP See comments in D2 re DPIE extension in 2020 Latest submission to DPIE of 2021 amended Ampol Kurnell Terminal OEMP Stage 2 Final on 7 March sighted. Auditor shown evidence (dated 8 April) confirming DPIE approval of the OEMP and all Management Sub Plans – including ACS C/Cell LTEMP

	Annual Review				
D4	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: (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.	G	Now completed for years : • 2014, • 2015, • 2016, • 2018 • 2019 and; • 2020 Active/ongoing	Compliant	**Dec 2021 Note:** This is the 2021 Annual Review report Assessed again in 2021 IEA Aa previous Annual Review Reports posted to Ampol Public website Auditor noted NIL breaches

	Revision of Strategies, Plans & Programs				
D5	Within 3 months of the submission of an: (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. *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.*	G	Active/ongoing	Compliant	Refer to comments made in D2
	REPORTING				
	Incident Reporting				
D6	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.	G	Active/ongoing	Compliant	**Dec 2021 Update:** The DPIE and EPA receive email notifications of any ship that exceeds the EPL night-time noise limit To be assessed again in 2021 IEA
	INDEPENDENT ENVIRONMENTAL AUDIT				
D7	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: (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; (b) include consultation with the relevant agencies; (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);	G	Active/ongoing	Compliant	**2021 Update:** 2021 IEA completed Jan-Feb 2021 – identified one (1) non-conformance against **C4B – Demolition ERP** Requirement to amend ERP to account for Tank

	(d) review the adequacy of any approved strategy, plan or program required under these approvals; and (e) recommend measures or actions to improve the environmental performance of the development, and/or any assessment, plan or program required under these approvals. *Note: This audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.*			Note Non-Compliance in 2016 (2016 IEA started late)	101 demolition and send to DPIE. Although ERP was updated, evidence confirming Project manager sent into DPIE could not be located.
D8	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.	G	Active/ongoing	Compliant	Submitted for each IEA event – refer to comments in D4
	ACCESS TO INFORMATION				
D9	The Applicant shall, to the satisfaction of the Secretary: (a) make the following information publicly available on its website: · the EIS; SEE SSD5544 and MOD's 1, 2, 3, 4, 5 and 6; · current statutory approvals for the Development; · approved strategies, plans or programs; · 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; · a complaints register, updated on a quarterly basis; · copies of any annual reviews (over the last 5 years); · any independent environmental audit, and the Applicant's response to the recommendations in any audit; and · any other matter required by the Secretary; and (b) keep this information up-to-date, *Note: This requirement does not require any confidential information to be made available to the public*	G	Active/ongoing	Compliant Consent documents and DPIE Approved Construction, Demolition and Terminal EMP's and all Management Plans available on Ampol Public website	**2021 Update** 2021 IEA - Auditor confirmed all documents and information is posted on Ampol Public web site Auditor noted NIL breaches

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 ACS Management Works shall not extend beyond 30 April 2019	D	Active/ongoing	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 ACS management works, the Applicant shall provide evidence that an EPA accredited Site Auditor has been appointed to review and approve the RAP and long-term environmental management plan (LTEMP) (see Conditions C54 and C55, respectively).	D	Completed	Compliant	**2021 Update:** 2021 IEA – auditor noted EPA accredited site auditor appointed (Andre-Karl Smit – GHD) Sighted accreditation details on the NSW EPA website ref *Contaminated Lands Mgmt Act 1997*

	Remedial Action Plan				
C49	Prior to commencement of the ACS management works, the Applicant shall ensure the RAP 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. 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. ***Note: The Site Auditor should consider the Construction Quality Assurance Procedures in relation to the Environmental Guidelines: Solid Waste Landfills (EPA, 2nd Edition, 2016)***	D	Completed	Compliant	**2021 Update:** 2021 IEA – auditor noted DPIE and EPA submission evidence sighted 25/2/2019 for Site Audit Statement and Site Audit Report (AKS10-10186 dated 12/12/18).
	Containment Cell				
C50	Prior to commencement of the ACS management works, the Applicant shall prepare a Containment Cell Management Plan (CCMP) for the ACS management works. The plan shall be prepared in accordance with Condition D3 and shall: (a) be prepared by a suitably qualified and experienced person(s), in consultation with the EPA; (b) be approved by the Secretary; (c) describe details of the cell construction and filling activities including soil acceptance criteria for the containment cell; (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; (e) include a register to detail the type and volume of material excavated and disposed of as part of the ACS management works; and (f) include details of dust, asbestos, waste and groundwater monitoring requirements.	D	Completed	Compliant DPIE approved CCMP available on Ampol Public website	**2021 Update:** 2021 IEA – auditor sighted evidence of NSW EPA consultation and approved CCMP on website. Approval letter dated 15/2/18 sighted CCMP available on Ampol Public website
C51	The Applicant shall only place ACS sourced from within the site in the containment cell.	D	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: (a) be submitted to the EPA; (b) confirm the containment cell has been constructed in accordance with the CQAP; and (c) include a summary of the waste classification data (including characterisation and tracking) and monitoring data required under Condition C50 (e) and (f).	D	Completed	Compliant	**2021 Update:** 2021 IEA – auditor sighted confirmation of receipt by DPIE 8/10/20. Sighted AECOM Final Report 25/11/2020
	Long Term Environmental Management Plan				
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	Active/Ongoing	Compliant	**2021 Update** 2021 IEA – auditor sighted DPIE receipt email re C53 ACS Containment Cell LTEMP-incl RAR-SAS Sighted DPIE receipt email re Kurnell Terminal Stage 2 Final OEMP on 08/03/2021 Sighted DPIE Approval Letter re: Stage Two Final OEMP incl. ACS Containment Cell LTEMP-incl RAR-SAS on 08/04/2021

C54	Upon completion of the construction aspects associated with the ACS management works (which includes closure of the containment cell) closure of the containment cell, the Applicant shall: (a) implement the approved LTEMP and manage the containment cell in accordance with the approved LTEMP; and (b) ensure the containment cell is listed on the relevant planning certificate for the land, issued under Section 149(5) of the EP&A Act, for the site.	D/T	Active/Ongoing	Re (a) - GW well gauging and leachate management system insitu at C/Cell included in M7 PM program Re (b) amendments to Planning Certificate (SSC) delayed until final LTEMP is available in early 2021	Refer to comments in C53 2021 IEA – auditor noted: Re (a) Sighted evidence M7 PM program: maintenance of ACS C/Cell -GW well gauging and leachate management system & Weed mgmt. insitu at C/Cell Re (b) amendments to Planning Certificate (SSC) 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
	Pipeway Validation				
C55	Upon completion of the construction aspects associated with the ACS management works, the Applicant shall prepare a Validation Report of the pipeways. The report shall: (a) be submitted to the EPA and the Secretary for review; (b) be prepared in accordance with the RAP and the *Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites* (OEH 2011); (c) include details of the following: (i) sampling and analysis plan and sampling methodology; and (ii) results of any validation sampling compared to relevant guidelines/criteria.	D	Completed in 2020	Validation Report submitted to DPIE and NSW EPA - 8 Oct 2020	2021 IEA – auditor noted: Sighted Modification works – Pipeways Closure report, dated 28/04/2020 meets C55 requirements. Sighted confirmation correspondence of submission of Validation

					Report to DPIE and NSW EPA - dated 01/7/2020 Sighted additional correspondence re Pipeways Closure from EPA dated 23/7/2020

SSD 5544 MOD3 2018 – Tank 101 Demolition Works

	SCHEDULE B – ADMINISTRATIVE CONDITIONS				
	Conditions	**Applicable Phase:** Conversion (C) Demolition Terminal Operations (D/T) or General (applies to all phases) (G)	**Activity Status:** Completed Active/ongoing Inactive	**Compliance Status** Compliant Not Compliant Not Triggered	**Comments/Actions**
	Pre-Commissioning				`
D9	The Applicant shall, to the satisfaction of the Secretary: (a) make the following information publicly available on its website: • the EIS; • SEE Approvals and MOD's 1, 2, 3, • *and accompanying documents*; • current statutory approvals for the Development; • approved strategies plans or programs; • 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; • a complaints register, updated on a quarterly basis; • copies of any annual reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • any other matter required by the Secretary; and (b) keep this information up-to-date,	G	Completed Tank 101 demolished in 2018	Compliant	Refer to previous SSD5544 D9 comments made 2021 IEA Auditor noted NIL breaches

	Note: This requirement does not require any confidential information to be made available to the public.				
C4A	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 Tank 101 demolition works. 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.	D	Completed	Compliant Demolition of structures e.g. tanks already covered in ERP and scenarios	Conversion to Terminal project concluded on 31 March 2020. Reviewed during 2021 IEA Auditor noted NIL breaches
	Hours of Construction and Operation				
C19	High noise generation construction and demolition works including the pipeline removal works within the Eastern and Western Right of Ways, and the Tank 101 demolition works described in MOD 3, shall be confined to less sensitive times of the day, and shall not be undertaken on Sundays or public holidays or outside of the hours 7:00am and 6:00pm Monday to Saturday	D	Completed	Compliant	Refer to comments made in C4A

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	The Applicant shall, to the satisfaction of the Secretary: (c) make the following information publicly available on its website: • the EIS; • SEE and MOD 1; • MOD 2 and its accompanying documents; • MOD 3 and its accompanying documents • MOD 4 and its accompanying documents • current statutory approvals for the Development; • approved strategies plans or programs; • 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; • a complaints register, updated on a quarterly basis; • copies of any annual reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • any other matter required by the Secretary; and (d) keep this information up-to-date, Note: This requirement does not require any confidential info to be made available to the public	G	Active/Ongoing	Compliant	**2021 Update:** Recurrent actions assigned in Cintellate to review the Ampol Public Website every 3 months for currency and accuracy of content Reviewed during 2021 IEA All such documents available on the Ampol Public Website Auditor noted NIL breaches

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	**2021 Update:** Reviewed during 2021 IEA Auditor noted NIL breaches
B7B	Notwithstanding Condition B7A, the ACS Management works must not extend beyond 30 November 2019	D	Completed	Compliant	**Re MOD6 Submission**: A further extension to the project end date (March 2020) was approved by DPIE The Conversion to Terminal project concluded on 31 March 2020.

D9	The Applicant shall, to the satisfaction of the Secretary: (e) make the following information publicly available on its website: • the EIS; • SEE and MOD 1; • MOD 2 and its accompanying documents; • MOD 3 and its accompanying documents • MOD 4 and its accompanying documents • MOD 5 and its accompanying documents • current statutory approvals for the Development; • approved strategies plans or programs; a summary of the monitoring results of the Development, which have been reported in accordance with the various	D	Completed	Compliant	Refer to previous SSD5544 D9 comments made 2021 IEA Auditor noted NIL breaches

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

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

B7B	Notwithstanding Condition B7A, the ACS Management works must not extend beyond 31 March 2020	D	Completed	Compliant	The Conversion to Terminal project concluded on 31 March 2020.
D9	The Applicant shall, to the satisfaction of the Secretary: (f) make the following information publicly available on its website: • the EIS; • SEE and MOD 1; • MOD 2 and its accompanying documents; • MOD 3 and its accompanying documents • MOD 4 and its accompanying documents • MOD 5 and its accompanying documents • MOD 6 and its accompanying documents • current statutory approvals for the Development; • approved strategies plans or programs; • 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; • a complaints register, updated on a quarterly basis; • copies of any annual reviews (over the last 5 years); • any independent environmental audit, and the Applicant's response to the recommendations in any audit; and • any other matter required by the Secretary; and (g) keep this information up-to-date, Note: This requirement does not require any confidential info to be made available to the public	D	Completed	Compliant All DPIE Approved EMP's and Management Plans available on Ampol Public website	**2021 Update:** Both the capping of the ASC Containment Cell and the demolition works have concluded as of 31 March 2020 Refer to comments made above and previous SSD5544 D9 comments made 2021 IEA Auditor noted NIL breaches

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