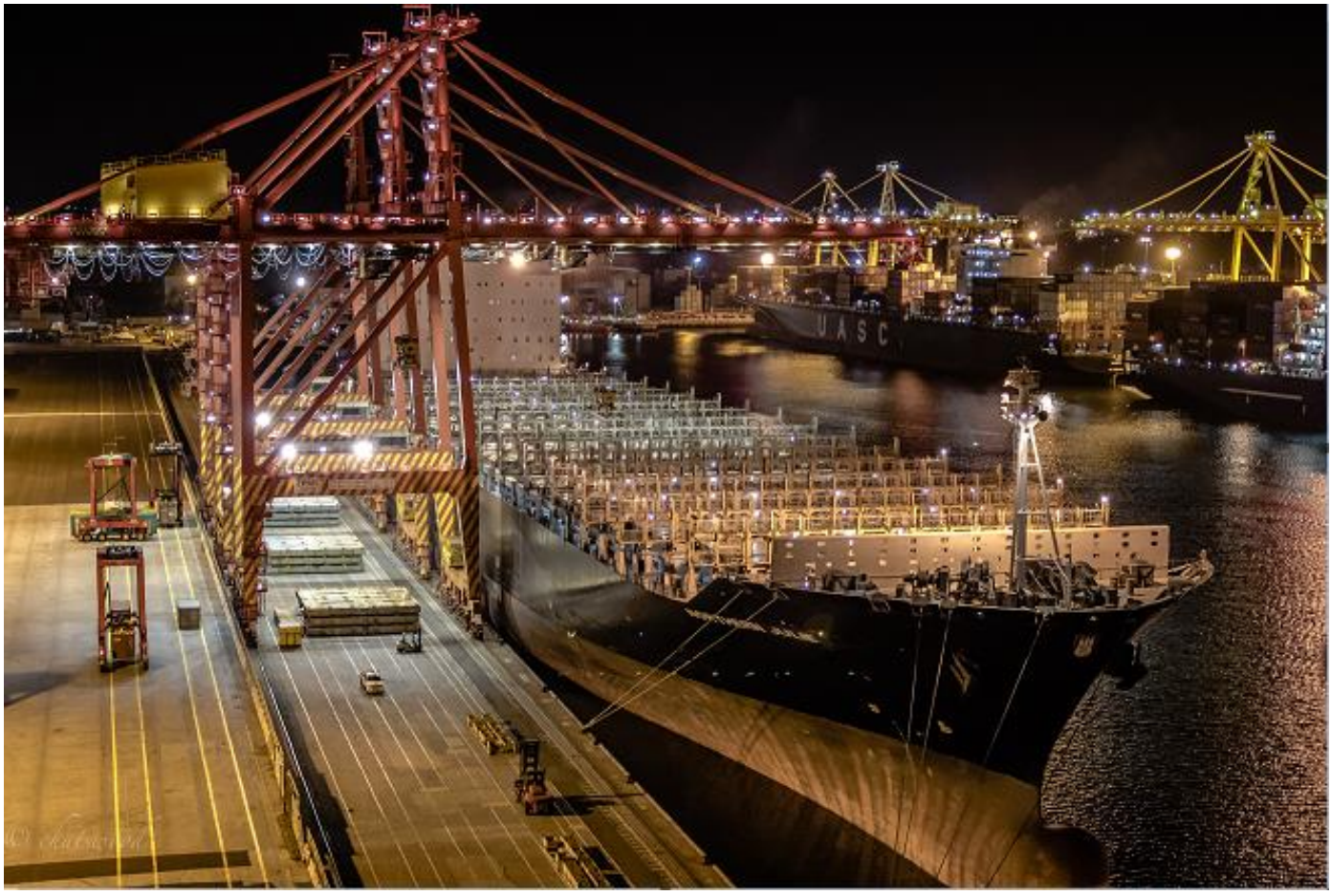
Port Botany Terminal

Environmental Management System

Annual Environmental Management Report - 2018

Reporting Period: 1 January to 31 December 2018



Courtesy of Bob Wood - Northern Julie berthed at Patrick's Port Botany Terminal, December 2017

Report No. PBT_HSE_REP_11_02_03

Date Issued: 27 February 2019

DOCUMENT CONTROL

Document control shall be in accordance with Patrick PBT's HSE Management System, section 14 – Management of Documents and Records, ensuring:

- The Operational Environmental Management Plan (OEMP or Operational EMP) is maintained and up-to-date;
- The current version of the OEMP is readily available to all Managers, employees and key stakeholders; and
- A copy of this report is retained for a minimum of seven years.

Listed below are the for this document.

Document History

Version No.	Page No.	Issue Date	Description of Amendment(s)	Prepared By	Approved By
1	All	17-Sep-18	Initial report	Marie Gibbs	Bruce Guy
2	All	27-Feb-19	Redraft as per NSW Government – "Annual Review Guidelines", Post-approval requirements for State significant mining developments, Oct 2015.	Marie Gibbs	Bruce Guy

A person using Patrick's documents or data accepts the risk of:

a) Using the documents or data in electronic form without requesting and checking them for accuracy against the original hard copy version; and

b) Using the documents or data for any purpose not agreed to in writing by Patrick.

Table of Contents

Title Block

Name of Operation:		Patrick [Port Botany Terminal]
Name of Operator:		Patrick Stevedores Operations Pty Limited
Consents / Licences:		Listed below
1	**Development consent / project approval:**	Port Botany Expansion, DA 494-11-2003-i (MOD 16)
	Name of holder of development consent / project approval:	NSW Ports (transferred from Sydney Ports Corporation)
2	**Development consent / project approval:**	Patrick Redevelopment, DA 453-12-2002-i (MOD 7)
	Name of holder of development consent / project approval:	Patrick Stevedores Operations Pty Limited
3	**Environmental Protection Licence:**	EPL 6962
	Name of holder of Environmental Protection Licence:	Patrick Stevedores Operations Pty Limited
4	**Consent to Discharge Industrial Trade Wastewater:**	24990
	Name of the consent holder:	Patrick Stevedores Operations Pty Limited
Date the Site was deemed Operational:		4 February 2016
Annual Review start date:		1 January 2018
Annual Review end date:		31 December 2018

I, Marie Gibbs, certify that this audit report is a true and accurate record of the compliance status of the Patrick Port Botany Terminal for the period 1 January 2018 to 31 December 2018 and that I am authorised to make this statement on behalf of the Patrick Port Botany Terminal.

Note:

a) *The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, $1 million and for an individual $250,000.*

b) *The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement – maximum penalty 5 years imprisonment); sections 307A, 307B, and 307C (False or misleading applications/information/ documents – maximum penalty 2 years imprisonment or $22,000 or both.)*

Name of authorised reporting officer:	Marie Gibbs
Title of authorised reporting officer:	ESC Manager / Environmental Representative
Signature of authorised reporting officer:	
Date:	27 February 2019

Acronyms and Glossary

Term	Definition
ACCC	Australian Competition & Consumer Commission
AEMR	Annual Environmental Management Report
Auto Strad ™	Automated Straddle Carrier – a mobile plant remotely controlled
Auto Yard or Automated Yard	Fenced off area where containers are stored between being loaded onto trucks or loaded onto vessels. When in operation only Auto Strads and containers occupy this area. In the event access is required the Auto Strads are noded out.
PB	Port Botany
Council	Bayside City Council comprises of Botany and Rockdale Councils. Further references to the former Botany and Randwick Councils remain throughout.
CoA	Conditions of Approval
DA	Development Application
Development Consents	• DA-494-11-2003-i; and • DA-453-12-2002-i
DG	Dangerous Goods
DPE	NSW Department of Planning and Environment
DSEWPC	Department of Sustainability, Environment, Water, Population and Communities (refer to Australian Government - Department of the Environment and Energy)
ESC	Environment, Sustainability & Compliance
EIS	Environmental Impact Statement
ERP	Environmental Response Plan
EPA	Environment Protection Authority
EPL	Environment Protection Licence
EPBC	Environment Protection and Biodiversity Conservation Act 1999
FRNSW	Fire and Rescue NSW
HAZMAT	Hazardous Materials
HSE	Health, Safety & Environment
IMDG	International Maritime Dangerous Goods (Code)
INC	Incident
MOD	Modification
NPWS	NSW National Parks & Wildlife Service
OEM	Original Equipment Manufacturer
OEMP	Operation Environmental Management Plan
OOG	Out of gauge
PBE	Port Botany Expansion
PBCCC	Port Botany Community Consultative Committee
PBROG	Port Botany Rail Optimisation Group

Term	Definition
PBRT	Port Botany Road Taskforce
POEO	Protection of the Environment Operations
Quay Crane	Purpose built crane mounted on rails on the wharf and can move along the wharf on these rails. Used for loading and unloading cargo from vessels onto the wharf or in the back reach of the crane into the Automated Yard.
Reach Stacker	Mobile plant used to pick up and carry containers with its telescopic arm and spreader. Used to handle OOG cargo, rail cargo on and off wagons.
Secretary	Prior to DA 494 MOD 16 the DPE referred to this position/office as Director-General.
SOP	Standard Operating Procedure
SPC	Sydney Ports Corporation
Spreader	A device used by quay cranes, Auto Strads or reach stackers which enables the mobile plant to lift, lock on to and carry containers safely.
TEU	Twenty-foot Equivalent Unit – the acceptable measure of container through-put and equal to 1x 20-foot (6.1m) long container i.e. 1x 40-foot container is equal to 2 TEU.

1. Statement of Compliance

The purpose of the Annual Environmental Management Report (AEMR) is to undertake the necessary assessment and review of compliance, Environmental Impact Statement (EIS) predictions, and the effectiveness of environmental management and mitigation works required. This AEMR has been prepared for the preceding twelve-month period (1 January 2018 to 31 December 2018) in accordance with the requirements of:

- CoA 494, C4.2 – Annual Environmental Management Report; and
- CoA 453, C6.6 – Annual Compliance Report

The overall assessment of the environmental performance for this reporting period demonstrated a high level of compliance with the relevant conditions of the two (2) development approvals, EPA Licence, trade waste consent and key performance indicators at Patrick's Port Botany Terminal.

Table 1A – Statement of compliance

Were all conditions of the relevant approval(s) complied with?	YES / NO
Development Consent DA 494-11-2003i MOD 16	**NO**
Development Consent DA 453-12-2002i MOD 8	**NO**
Environmental Protection Licence #6962	**NO**
Consent to Discharged Industrial Trade Wastewater #24990	**YES**

Conditions of the above approvals which are non-compliances are identified in Table 1C below.

Table 1B – Non-compliances

Relevant Approval	Cond. #	Condition Description (Summary)	Compliance Status Note 1	Comment	Where addressed in AEMR
EPL 6962, DA 453	L1.1, 3.33	Except as provided by a licence issued under the POEO Act 1997 s120 shall be complied with and in connection with the carrying out of the development.	**Non-Compliant**	A minor water pollution incident (Berth 7, covered by DA 453, EPL 6962 L1.1) on 9 September 2018 was reported to the EPA, DPE and NSW Ports.	App. E, App. B
DA 494	C3.1	Provide quarterly reports to the DPE and EPA (formerly DEC), where relevant outline details of the complaints received.	**Non-Compliant**	Community Feedback Quarterly Report to the DPE and NSW Ports, but not the EPA.	App. A
DA 494	C4.2	The AEMR will be prepared within twelve months of commencement of operation, and every 12 months thereafter;	**Non-Compliant**	The 2017 AEMR was issued on 20 August 2018, approx. 6 months after the due date of 28 February.	App. A
DA 453	3.52	Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the DPE outlining the basic facts.	**Non-Compliant**	Notified the DPE approx. 30hrs after the incident (i.e. 9 September 2018 at Berth 7 a quay crane's waterside rail brake ruptured due to wear/tear and leaked oil out on to the wharf causing a minor water pollution incident) was reported to the EPA.	App. B

Note 1 – Refer to next page for compliance status key for the risk-level of the non-compliances

Table 1C - Compliance status key for Table 3

Risk Level	Colour Code	Description
High	**Non-compliant**	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	**Non-compliant**	Non-compliance with: • potential for serious environmental consequences, but is unlikely to occur; or • potential for moderate environmental consequences, but is likely to occur
Low	**Non-compliant**	Non-compliance with: • potential for moderate environmental consequences, but is unlikely to occur; or • potential for low environmental consequences, but is likely to occur
Administrative non-compliance	**Non-compliant**	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

2. Introduction

2.1 Location and associated operation

Patrick's Port Botany container terminal (PBT) is located at the end of Penrhyn Road (Inter Modal Access Road) in Port Botany, NSW 2036. Foreshore Road and Botany Road are located to the north and Brotherson Dock to the south. Figure 1 below provides an overview of the site context which is comprised of approximately 63 hectares of land. The original terminal was approximately 45 hectares, and as a result of the Port Botany Expansion Project a further 18 hectares (The Knuckle) was added to Patrick's terminal.

In April 2015, the terminal replaced its manual straddle fleet with automated straddles (Auto Strad™). The terminal operates 24 hours a day, seven days a week. Operations undertaken within the site boundary include:

- Truck processing and container exchange activities: Road transport trucks enter the terminal, access the Truck Grid and reverse into truck lanes where they are either loaded or unloaded by an Auto Strad. An empty container exchange area is located parallel to Penrhyn Road (eastern side of the terminal), and an empty container park at the rear of the terminal's rail siding. Road transport trucks are unloaded by heavy forklifts.
- Rail siding activities: Freight locomotives are serviced along the rail siding parallel to Penrhyn Road (northern side). Locomotives enter the site from the north-east are loaded / unloaded by reach stackers. Trucks are also loaded with containers using reach stackers, transporting export containers to the Truck Grid and automated yard (Auto Yard), or carrying import containers from the Truck Grid to the rail siding for loading onto trains.
- Automated container yard activities: Containers transit through the terminal via the Auto Yard. Current operations provide a storage capacity of approximately 5,000 ground slots, with an average of 4,000–8,000 containers located in the yard at any one time (depending on the time of year). The containers are manoeuvred through the Auto Yard, and to and from trucks at the truck grid via the use of Auto Strads. Approximately forty Auto Strads are available for use throughout the Auto Yard at any given time.
- Quay crane activities: Vessels are loaded/unloaded by nine quay cranes on Brotherson Dock. Containers are transferred from vessels to the Auto Yard by Auto Strads to the out of gauge area via Mafi trucks, and from the Auto Yard by Auto Strad to the back reach of the quay cranes to be loaded onto vessels.
- Maintenance activities: Routine maintenance on equipment and plant is carried out in the purpose-built workshop, and when required on mobile plant in-situ e.g. quay cranes.

2.2 Key Structure Elements

Patrick's PBT comprises of the original terminal and 'The Knuckle' and the following key structural elements:

a. Quay line 1400 metres;
b. Depth alongside quay line – ranges from approximately 14 to 17 metres;
c. Berths – four (4);
d. Quay Cranes – nine (9);
e. Automated Straddles – 47;
f. Onsite import and export container yard including power units for refrigerated containers;
g. Onsite empty container handling facility;
h. Truck Grids – 31 lanes for discharging or loading containers;
i. Rail siding length – 1.490 km (i.e. 2 parallel tracks of 0.745 km each)
j. Heavy duty pavement and roadways;
k. Stormwater drainage infrastructure including pumps, pollution control devices, trenching and kerbing;
l. Light tower foundations – light, radar and camera poles;
m. Maintenance – offices, workshop, cleaning bays, refuelling station;
n. Administration and Tower – offices, amenities, facilities (security, first aid, canteen; and
o. Workforce and visitor car parking areas.

2.3 Changes to key Structural Elements During the preceding 12 months

During the preceding twelve-month period (1 January 2018 to 31 December 2018), there were no changes made to key structural elements:

2.4 Contact details for key personnel

Names and contact details for the key personnel who are responsible for the environmental management of the operation (terminal) are:

Marie Gibbs
Environmental, Sustainability & Compliance Manager (and appointed Environmental Representative)
Patrick
Gate B105A, Penrhyn Road
Inter-Terminal Access Road
Port Botany NSW 2019

Mobile: 0417 442 963
Email: m.gibbs@patrick.com.au
Web: http://www.patrick.com.au/

2.5 Maps

Figure 2.5A: Location of Patrick's Terminal at Port Botany

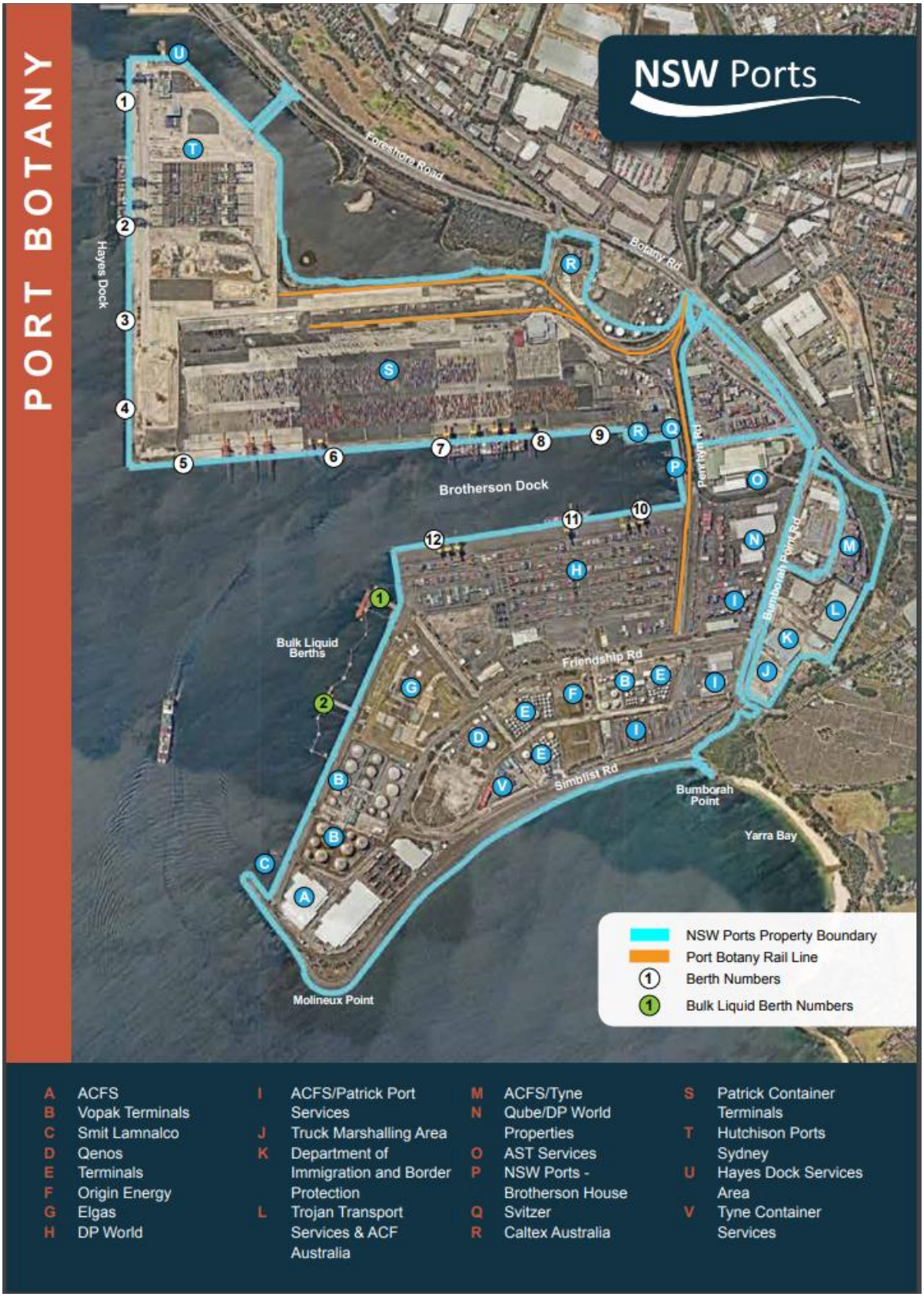


Figure 2.5B: Location of Patrick's site at Port Botany showing the layout

3. Approvals

Table 5 below lists all the approvals currently held by Patrick Stevedores Operations Pty Ltd which are relevant to the terminal's operations and any changes made to those approvals during the reporting period.

Table 3 – Approvals for the Patrick Port Botany Terminal

No.	Details	Approval Name, Reference Number, Date Approved / Issued, Name of Applicant	Changes made during reporting period (1 January to 31 December 2018)
1	**Development Consent:**	**DA-494-11-2003-i** (MOD 16, 24 October 2017)	• C1.2 – General Requirements • C1.2A – Interim Uses Port, Maritime and Waterways Related Uses – Hayes Dock Services Area • C1.2B – Operation Environmental Management Plan – Port, Maritime and Waterway Related Interim Uses Hayes Dock Services Area • C1.2C – Noise Management Plan – Interim Uses Hayes Dock Services Area Operation • C1.2D – Noise Compliance Assessment – Interim Uses Hayes Dock Services Area Operation • C1.2E – Complaints Handling Procedure for Hayes Dock Services • C2.15A – Hazards and Risk Management – Hayes Dock Interim Uses • C2.17 – Hazards and Risk Management – Storage and Handling of Dangerous Goods • C3.1 – Community Information, Involvement and Consultation • C3.2 – Community Consultative Committee • C4.2 – Annual Environmental Management Report (AEMR) • Reference to 'Temporary Uses' replaced with 'Port and Maritime Related Interim Uses' • Replace all references to 'DEC' with 'EPA' • Replace all references to 'Director-General' with 'Secretary' • Dangerous Goods Reporting Thresholds - Schedule 4, Tables 1 and 2
	Applicant:	Patrick Stevedores Operations Pty Ltd	
	Issued by	Department of Planning and Environment	

No.	Details	Approval Name, Reference Number, Date Approved / Issued, Name of Applicant	Changes made during reporting period (1 January to 31 December 2018)
2	**Development Consent:**	**DA-453-12-2002-i** (MOD 7, 26 September 2013)	No change
	Applicant:	Patrick Stevedores Operations Pty Ltd	
	Issued by	Department of Planning and Environment	
3	**Environmental Protection Licence:**	**6962** (Notice of Variation of Licence – 13 June 2017)	No change
	Applicant:	Patrick Stevedores Operations Pty Ltd	
	Issued by:	NSW Environment Protection Authority	
4	**Consent to Discharge Industrial Trade Wastewater Consent No.:**	**24990** (24 June 2015)	No change
	Applicant:	Patrick Stevedores Operations Pty Ltd	
	Issued By:	Sydney Water Corporation	

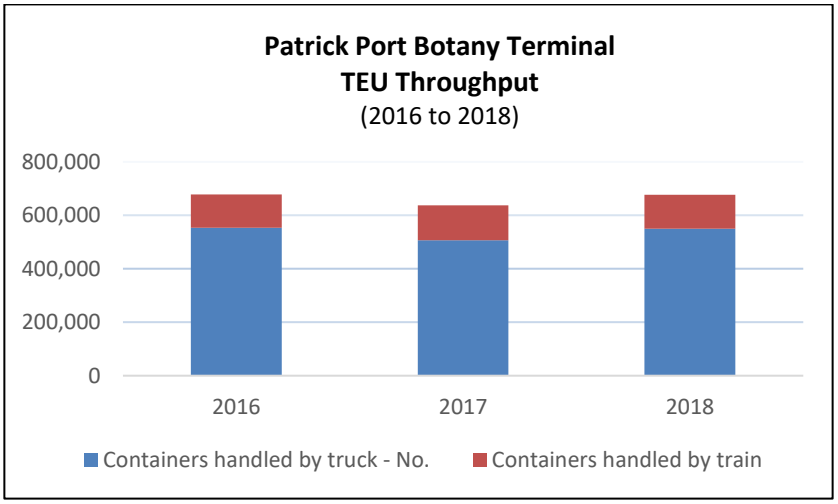
4. Operations Summary

4.1 Terminal Operations - TEU Throughput 2018

Table 4.1: Patrick PBT – TEU Throughput 2016 to 2018

Patrick PBT	Containers Handled - TEU Throughput (No.)		
	2016	2017	2018
Throughput	679,017	637,359	**677,635**

Figure 4.1: Patrick PBT – TEU Throughput 2016 to 2018



The volume of TEU throughput has remained consistent since 2016, along with the share handed landside (i.e. by truck and by train).

4.2 Terminal Operations – Landside Transport Mode Share 2018

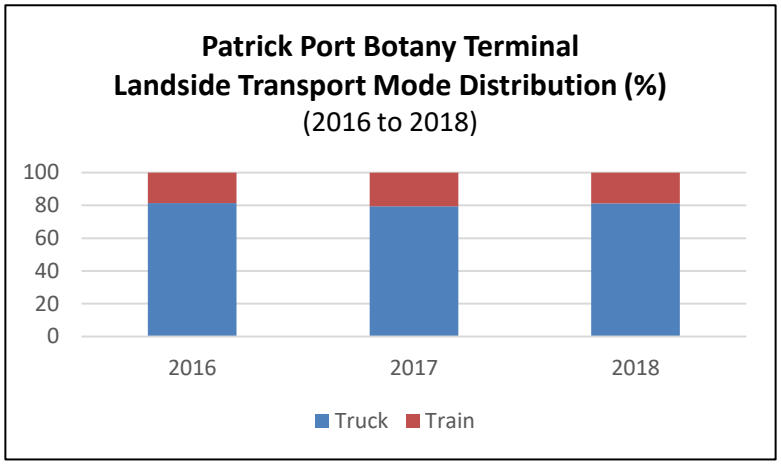
Table 4.2: Patrick PBT – Landside Transport Mode Share 2016 to 2018

Patrick PBT	Landside Transport Mode Share (%)		
	2016	2017	2018
Truck	81.5	79.5	**81.2**
Train	18.5	20.5	**18.8**

Over the past three years the share truck versus train has been consistently 80:20.

In November 2018 NSW Ports reported they are set to invest in 'on-dock' rail infrastructure capacity at each of the three container terminals at Port Botany, commencing in 2019. Investment will be staged, with stevedores being required to invest in rail operating equipment to meet target terminal capacities Patrick is the first of the three stevedores to accept the investment.

Figure 4.2: Patrick PBT – Landside Transport Mode Share 2016 to 2018



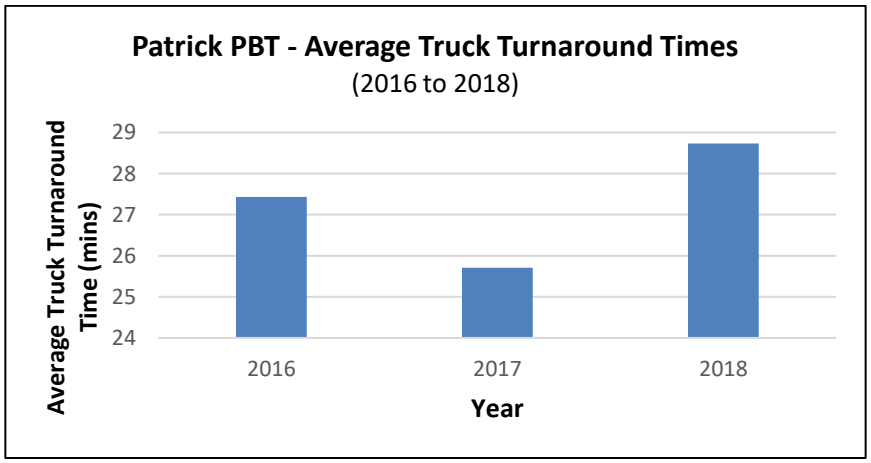
NSW Ports reports the investment in rail infrastructure will reduce the growth in truck movements around the port. When fully operational this investment will reduce truck-kilometres travelled in Sydney by at least 10 million per year. This is estimated to save over 2 million litres of diesel per year which is the equivalent to a net reduction in CO_2 emissions of more than 5,400 tonnes a year. Patrick's agreement with NSW Ports will significantly increase the terminal's rail capacity and enhance efficiency in container movements at the port.

4.3 Terminal Operations – Average Truck Turnaround Times 2018

Table 4.3: Patrick PBT – Average truck turnaround times (2016 to 2018)

Patrick PBT	Truck Turnaround Times (mins)		
	2016	2017	2018
Truck	27.43	25.71	**28.73**

Figure 4.3: Patrick PBT – Average Truck Turnaround Times (2016 to 2018)



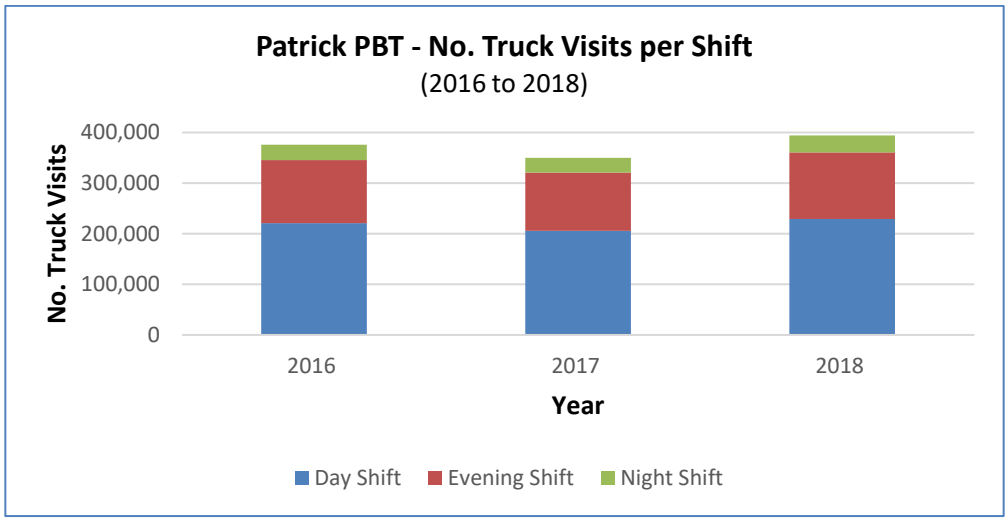
There was as slight increase in the average truck turnaround times for 2017 and 2018.

4.4 Terminal Operations – Hours of Operation and Truck Visits by Shift 2018

Table 4.4: Patrick PBT – Hrs of Operation and Number of Truck Visits by Shift (2016 to 2018)

Patrick PBT Shift hours of operation	No. Truck Visits		
	2016	2017	2018
Day – 0600hrs to 1400hrs	220,602	205,593	229,321
Evening – 1400hrs to 2200hrs	124,633	115,178	131,266
Night – 2200hrs to 0600hrs	30,832	28,890	33,636
Total	376,067	349,661	394,223

Figure 4.4: Patrick PBT – Hrs of Operation and Number of Truck Visits by Shift (2016 to 2018)



The proportionate number of truck visits during day shift, evening shift and night shift remains consistent over the past 3-years (2016 to 2018).

Patrick's investment with NSW Ports in rail infrastructure will significantly increase the terminal's rail capacity and enhance efficiency in container movements at the port. This in turn will reduce the number of trucks required to visit the terminal.

4.5 Next Reporting Period (forecast)

During the next reporting period, Patrick expects that operations and container volumes will remain stable with the services currently under agreement.

- The fleet of existing container handling equipment is anticipated to change with Crane 02 to be deconstructed.
- The construction of the rail infrastructure is anticipated to progress in 2019.

5. Environmental Performance

This section provides a summary of the environmental outcomes that were intended for the reporting period and detail on achieving these. Actions required as an outcome of the 2017 Annual Review have also been identified, including detail on actions undertaken and when these were completed.

5.1 Air Quality Management

Development Consent DA-494	C2.1, C2.2, C2.3 and C2.4
Development Consent DA-453	3.45, 3.46, 3.47 and 3.48
EPA Licence 6962	O3.1
EIS Prediction & Conclusion	23.8.2
Performance during the reporting period	No visible dust emissions were reported to Patrick during this period. No excavated material is piled on the terminal. Wharf and road sweeping are routinely carried out on the terminal to reduce build-up of debris and dust.
Trend / key management implications	The overall opportunity for odour and dust generation from operational areas of the Patrick terminal is very low. In addition, it is difficult to isolate Patrick's contribution from other potential contributors such as roadworks, construction areas, neighbouring stevedores and/or nearby industries to the surrounding environment. Patrick relies on employees and contractor to report any odour or build-up of dust/debris on the terminal. These events are investigated and where attributed to terminal activities they are cleaned up. Details are recorded in Patrick's HSE incident/event database and the terminal's Public Comment, Inquires & Complaints Register.
Implemented / proposed management actions	Neighbouring stevedore Hutchison (SICTL) has been undertaking dust mitigation activities to reduce the risk of any dust / sand being blown onto the Patrick site from the undeveloped land located behind Patrick's 'The Knuckle' area. Patrick has implemented regular visual environmental inspections of the terminal to verify that control measures are in place and functioning correctly and to identify any air quality issues or the presence of any deposited dust / debris.

5.2 Water Quality Management

Development Consent DA 494	C2.14 and C2.15
Development Consent DA 453	3.26, 3.27, 3.28, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 3.35 Note1, 3.36 Note1, 3.37, 5.1, 5.2, 5.3, 5.4 Note1, 5.5, 5.6, 5.7 Note1, 6.2 (a) and 6.4 (a) (Note1 MOD-7 issued 26 September 2013 includes the specific details of the EPL applicable at the time, since then the EPL has had several revisions and changed.)
EPA Licence 6962	L1.1
EIS Prediction & Conclusion	16.4.2, 17.6.2, 18.4.2, 18.4.3, 18.5.2, 33.2.2, 33.3.2 and 33.5
Industrial Trade Wastewater Consent 24990	Schedule 1

Performance during the reporting period	In 2018, there were 60 'environmental' related events, of which 10 were reported to regulatory agencies. With one exception Patrick has generally complied with the requirements under section 120 of the POEO. On 9 September 2018 at Berth 7 (covered by DA 453) a quay crane's waterside rail brake ruptured due to wear/tear and leaked oil out on to the wharf. The oil leaked into the high voltage cable trench, crane rail and surrounding wharf line. The remaining oil were contained within thearea and cleaned up without any discharge to the environment and the incident was classified as 'near miss - environmental'. The incident/events were controlled through the implementation of spill response procedures, including the use of absorbent materials and where required further clean up using 3rd party equipment. **Actions from 2017 Annual Review** (refer to Section 6) *15/2017 - Patrick ensure stormwater drains marked with "Clean Rainwater Only".* Currently underway, refer to Photo 5.2A below. *20/2017 - Patrick to relocate manual straddles to bunded area behind Maintenance.* Completed, refer to Photo 5.2B below.

Photo 5.2A: Stormwater drains marked "Clean Rainwater Only"

Photo 5.2B: Manual straddles in bunded area behind Maintenance

Trend / key management implications	Spill kits are situated in key locations around the terminal and Patrick employees have been trained in the use of spill kits and incident response. Leaks/spills are quickly identified, contained and reported. A spill trailer is also available at the terminal. Stormwater quality improvement devices (SQIDs) including drain wardens, SPEL Puraceptors, and gross pollution traps (GPTs) have been installed at the terminal and in use. The plant wash-down area in the Maintenance Workshop is bunded and the wastewater is collected in a separate pit and passed through a filter aid unit for oil / water / solids prior to licensed discharge to discharging to trade waste (sewer). The diesel trans-tanks area is also bunded with a separate drain to a SPEL Puraceptor to contain any leaks/spills that may occur. Stormwater from the four refuelling bays drain to Refuelling Bay #2 where an underground SPEL Puraceptor is located. A third SPEL Puraceptor is located in the Auto Strad Launch Pad.

Photo 5.2C: Diesel trans-tanks in bunded area, spill kits

Photo 5.2D: Spill trailer connected ITV/Mafi located mid-way on the wharf

Implemented / proposed management actions	Engineering & Maintenance (E&M) Manager identified controls for key leak sources to reduce the risk of leaks, personnel allocated to progress. Complete review/update of Stormwater Management Plan currently being updated as part of the OEMP review.

5.3 Noise Management and Monitoring

Development Consent DA 494	C2.5, C2.6, C2.7, C2.8, C2.9, C2.10, C2.11
Development Consent DA 453	3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 5.8 and 6.4 (e)
EPA Licence 6962	L3.1, L3.2, L3.3, L3.4, L3.5, L3.6 and L3.7; Special Condition E1.1 and E1.2
EIS Prediction & Conclusion	22.4.2 and 22.5.2

Performance during the reporting period

During 2018 the site has not received any noise complaints from the community which could be attributed to terminal operations.

Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits in L3.2. The noise emissions received at the designated locations have been estimated via calculation.

Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) received from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise emissions in the community as having singularly come from Patrick's operations.

Actions from 2017 Annual Review (refer to Section 6)

22/2017 - Patrick to ensure a noise [acoustics] wall has been established between Patrick and Penrhyn Estuary.

A noise attenuation wall was constructed by Hutchison Ports and is located within Hutchison's Terminal positioned between Hutchison's rail siding and the Penrhyn Estuary. The wall is 3 metres high when parallel to the railway siding, and 4 metres high along the northern and eastern sides of the Hutchison Terminal.

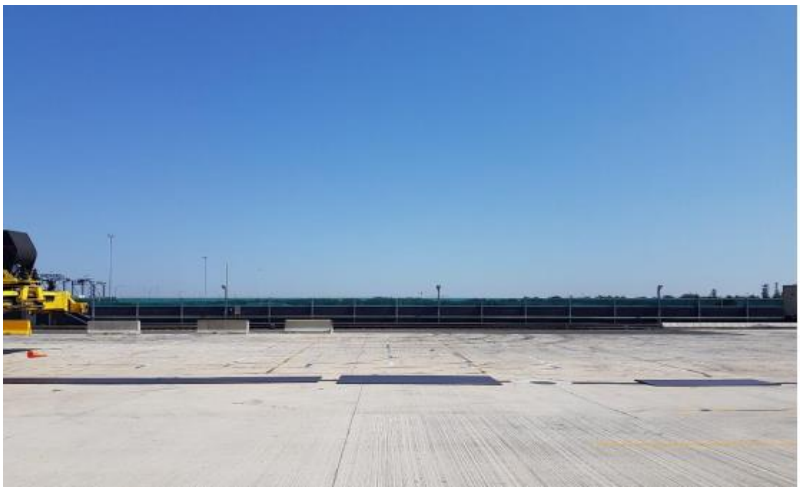


Photo 5.3.A: In the background is the noise attenuation wall between the Hutchison Port's site and the Penrhyn Estuary

Trend / key management implications

There appears to be no significant impact on noise limits and noise emissions from the Patrick terminal during 2018.

Implemented / proposed management actions	Noise monitoring will continue to be carried out at 6-monthly intervals as per the conditions of the Patrick Environmental Protection Licence (EPL 6962). Noise mitigation is covered in the Site Induction which includes the requirements to minimise noise from operations and cargo handling; this topic will also form part of routine tool box talks. Patrick has initiated a noise reduction project to reduce noise emissions: • Reversing beepers on reach stackers and forklifts have been replaced with low tonal reversing alarms (quackers). • Connecting and moving alarms on the Auto Strads fleet (44) are being replaced with LED blue flashing lights. This engineering control is continuing in to the first half of 2019. Copies of the noise monitoring reports for May 2018 and November 2018 have been posted on the Patrick website http://www.patrick.com.au/environment-monitoring-reporting At the 3-monthly Port Botany Consultative Community Committee (PBCCC) NSW Ports raises any noise complaints received from the local community and/or EPA.

5.4 Operational Traffic Management

Development Consent DA 494	C2.12
Development Consent DA 453	3.9, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25 and 6.4 (c)
EPA Licence 6962	N/A
EIS Prediction & Conclusion	21.10

Performance during the reporting period	The make-up of Patrick's transport of container throughput via road and rail in 2018 remains similar to that for 2016 and 2017.
Trend / key management implications	A review of total Port Botany rail performance presented to the Transport for NSW - Port Botany Rail Optimisation Group (PBROG) in the most recent report April 2018: **Rail Volume was 34,020 TEU in March 2018** This represents a drop of around 5,000 TEU's from before December when the regional volumes became depressed. The 337,468 TEU of FYTD 17/18 was an increase of 12,801 TEU over the same period in 16/17. **Rail mode share** FYTD 17/18 is 18.3%, down from 18.9% to the end of December. Rail mode share for March was 18.0% after touching recent lows of 16.7% in February. The cause of this decline is predominantly lower regional exports and redirection of southern volumes away from Port Botany. Both are expected to rebound next quarter. Port Botany has the capacity to handle more than 7 million TEU a year, currently only 2.6 million TEU are handled at the port. Of all the containers imported each year through PB, 80% are unloaded within 40 km of the port. **Actions from 2017 Annual Review** (refer to Section 6) *2/2017 - Patrick to ensure traffic parking on Ramp D is permitted by a consent* Traffic queued on Ramp D is covered by DA 494, B2.18 (not DA 453, C3.23). *AEMR #8 - Patrick to arrange routine inspections of markings on internal roadways.* Included in the quarterly environmental inspections of the terminal.
Implemented / proposed management actions	Transport for NSW holds two formal forums for rail and road operations at PB. 1. **Port Botany Rail Optimisation Group (PBROG)** Established in 2015 to help drive improved rail network utilisation and efficiency at the port. A monthly meeting is held with representatives from Patrick, ARTC, stevedore operators, rail operators, 1-Stop, NSW Ports, Transport for NSW, freight and logistics operators etc. 2. **Port Botany Road Taskforce (PBRT)** Provides advice to Transport for NSW on strategies and actions to optimise the movements of containers by road to and from the container terminals at PB.

5.5 Waste and Wastewater Management

Development Consent DA 494	C2.13, C2.13A, C2.14, C2.15
Development Consent DA 453	3.38, 3.39, 3.40, 3.41, 3.42, 3.43, 3.44, 6.4 (d), 7.5, 7.21, 7.22, 7.23, 7.24
EPA Licence 6962	L2.1, L2.1, L2.3 and L2.4; and O1.1, O4.1, O4.2
EIS Prediction & Conclusion	33.2, 33.3, 33.5 and 33.4
Industrial Trade Wastewater Consent 24990	Schedule 1
Performance during the reporting period	Review of the waste certificates and invoices provided by waste collection service providers to Patrick (summarised in the Waste Register) show waste levels do not exceed those limits as listed in EPL 6962, Consent DA-453, or in the *Protection of the Environment Operations Act 1997,* Schedule 1. All waste removal service providers are engaged under a Service Agreement or a Purchase Order, and area licenced by the EPA for the appropriate scheduled activity. Waste skip bins are covered and routinely emptied. Site environmental inspections are conducted at least every three months and include an inspection of waste storage areas. In August 2018 waters adjacent to Brotherson Dock were dredged to remove loose items e.g. lashing bars. Wastewater diverted to sewer is routinely monitored and tested as per Patrick's Industrial Trade Wastewater Consent (No. 24990, dated 24 June 2015). The Backflow Prevention Devices were last tested by Matic Plumbing (approved by Sydney Water) on 3 July 2018. Patrick supported the annual NSW Ports Clean Up Australia Day initiative involving Port Botany Precinct tenants cleaning up Prince of Wales Drive area on 27 February 2018. **Actions from 2017 Annual Review** (refer to Section 6) *4/2017 - Patrick to ensure the quantity of hazardous and/or industrial and/or Group A waste generated in 2018 does not exceed the allowable limit.* The terminal's Waste Register records the volume of waste oil (the main type of hazardous waste generated at the site). The volume of hazardous waste generated in 2018 was approximately 40 tonnes well below the allowable limit 200 tonnes per year. *5/2017 - Patrick to ensure the quantity of hazardous and/or industrial and/or Group A waste stored on the premises in 2018 at any one time does not exceed the allowable limit.* The terminal's Waste Register shows the most waste oil stored on site was approximately 11 tonnes in March 2018 which is well under the limit of 70 tonnes at any one time. *6/2017 - Patrick to include into the site induction the recycling practices adopted at the site.* Recycling was included in the June 2018 revision of the terminal's induction. *9/2017 - Patrick to review extend of area for landscaping [under Ramp D], and if included plant native plants indigenous to the area/soil type and manage any planting.* The leased area under Ramp D (also known as the Undercroft) was returned on 14 September 2018 to NSW Ports in a condition to their satisfaction.

	14/2017 - Patrick to confirm waste oil has been disposed of appropriately and stored in an undercover location. The disposal of waste oil has been completed and records retained as per POEO (Waste) Regulations 2014, waste oil stored on bunded pallets in the chemical store.
Trend / key management implications	The volume of waste (e.g. metal, waste oil, and oily rags) recycled in 2018 has remained consistent with previous years as the recycling practices carried out by the Maintenance Department remains common practice. The volume of paper and cardboard recycled in 2018 remains consistent with previous years. There is an opportunity for the recycling processes adopted at the terminal to be documented. Windblown litter and debris have been found to be minimal since enclosed rubbish bins were installed initially at every second truck lane shelter at the Truck Grid (2015) and upgraded to every truck lane in 2017. In 2018 at the request of an employee the same type of rubbish bins have been installed at the Operations vehicle parking area (refer to photo 5.5A). These new bins have replaced the former rubbish bins from which litter was reported to escape. The rubbish bins in both locations are emptied several times per week. As the wooden stingers along the quay line come up for repair they are being replaced with recycled plastic stringers (as illustrated in Photo 5.5B).

Photo 5.5A: Enclosed rubbish bins next to Operations vehicle parking area

Photo 5.5B: Wooden stringers (left) being replaced with recycled plastic stringers (right)

Implemented / proposed management actions	The recycling program conducted by NSW Ports has been reviewed. A similar program is being considered for the Patrick terminal, including recycling awareness and monthly waste reporting for 2019/2020.

5.6 Dangerous Goods Management

Development Consent DA 494	C2.16, C2.17, C2.18
Development Consent DA 453	7.4, 7.6, 7.7, 7.8, 7.9, 7.10
EPA Licence 6962	A1 Scheduled Activity (Chemical storage); and O1.1
EIS Prediction & Conclusion	18.5.2, 28.10.1 and 32.2.4

Performance during the reporting period

The two development consents cover different berths:

- Berth 6 (DA 494), and Berths 7, 8 and 9 (DA 453)

On 24 October 2017 the DPE approved MOD 16 for DA 494. The most significant amendments included in MOD 16 applicable to Patrick's The Knuckle i.e. Berth 6 was condition C2.17.

There were no modifications made to DA 453 in 2018.

As a reference, during the 1995/1996 period 825 tonnes (average value) of Class 2.3 Dangerous Goods were transited through Port Botany.

In 2018, a total of 253 tonnes of Class 2.3 transited through the entire terminal which is well under the 825 tonnes limit (transited in 1995/96) required under the two conditions.

- **Berth 6** – 90 tonnes of Class 2.3 dangerous goods transited through between 1 September 2017 to 31 August 2018
- **Berths 7, 8 and 9** - 163 tonnes of Class 2.3 dangerous goods transited through between 1 September 2017 to 31 August 2018

In 2018, Patrick personnel involved in the handling of dangerous goods (i.e. shift and yard managers, stevedoring managers, rail coordinators and tower and senior clerks) completed the two-day Maritime General Awareness & Maritime Function Specific training course (AMSA accepted DG Training Course based on based on the current IMDG Code Amendment 38-16, which came into force on 1 January 2018 for the next two years) training provided by All Modes Dangerous Goods Training (AMSA Course Approval No. 5111). A 1-day refresher is required to be completed annually.

All new Patrick employees involved in the handling of dangerous goods at required to complete the initial 2-day training course.

The terminal issued an annual statement of compliance for 2018 to the Port Authority of NSW (Dangerous Goods Unit) on the 9 January 2019.

Dangerous goods (i.e. shipping containers) are routinely spot checked by the Dangerous Goods Inspector / Officer from the Port Authority NSW to ensure red line cargo does not stay on the terminal past its allowable dwell time limit.

In 2018, a chemical audit was completed by Maintenance personnel to rationalise the types of dangerous goods and hazardous substances and ensure are stored correctly.

A program of at least quarterly environmental inspections was implemented in 2017. During 2018 routine environmental inspections were conducted of the Operational and Maintenance work areas. The initial environmental inspections of the Maintenance areas identified a number of opportunities for improvement.

Performance during the reporting period	**Actions from 2017 Annual Review** (refer to Section 6) *7/2017 - Patrick to clarify with NSW Ports what compliance with DA 453 condition 3.49, looks like prior to the 2018 audit.* From 1 September 2017 to 31 August 2018 there were 163 tonnes of Class 2.3 dangerous goods transited through Berths 7, 8 and 9 of Patrick's terminal which is well under the 825 tonnes limit required under this condition. (For the same period a total of 253 tonnes of Class 2.3 transited thru the entire terminal (including Berth 6)). *13/2017 - Patrick to ensure the site chemical storage audit is completed and has been reviewed with Maintenance.* In 2018, the Maintenance Department completed the chemical storage audit. Follow up inspections found bunding of DGs were in place and routinely inspections of the chemical store are undertaken. *AEMR #3 - Patrick to investigate locking specific Class / UN Cargo from being handled/stored at Berth 6.* Clarified with the issue of DA 494 MOD 16. On 26 September 2018 Patrick reported to NSW Ports eight (8) containers of DGs (Class 2.3) transited through Patrick's Berth 6 during the period 1-Sep-17 to 31-Aug-18. NSW Ports combined the volumes from Patrick and Hutchison. *AEMR #4 - Patrick to clarify with NSW Ports / DPE what compliance with DA 494 C2.18 looks like.* Clarified with the issue of DA 494 MOD 16. On 16 October 2018 NSW Ports reported to the DPE the cumulative data from Patrick and Hutchison. The letter stated the total volume of 21 containers of packaged DG material is well below the defined reporting threshold limit of 157 containers (DA 494 MOD 16, Table 1, Schedule 4).
Trend / key management implications	Consistent and routine inspections of Maintenance areas and stores has resulted in significant improvements with handling / storing dangerous goods / hazardous chemicals.
 **Photo 5.6A:** Oil & Grease store – oils on plastic bunded pallets and grease (due to high viscosity) on wooden pallets	 **Photo 5.6B:** Flammable liquids cabinet
Implemented / proposed management actions	The 1-day refresher training in the IMDG Code Amendment 39-18 (effective and available from January 1, 2019 and mandatory from January 1, 2020) is planned for Patrick personnel in 2019. Routine environmental inspections, and audit of chemicals and dangerous goods and hazardous chemical storage areas will continue during the next reporting period.

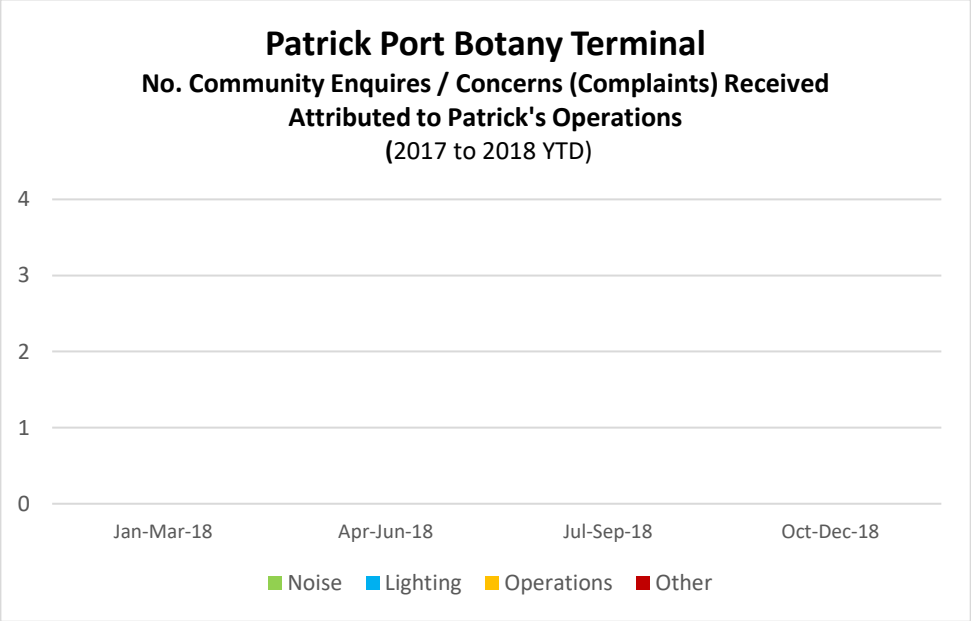
5.7 Aviation Operational Management

Development Consent DA-494	C2.21, C2.22, C2.23, C2.24 and C2.25
Development Consent DA-453	3.61
EPA Licence 6962	N/A
EIS Prediction & Conclusion	25.5, 29.3.3, 29.4 and 30.4.2
Performance during the reporting period	Patrick has complied with the requirements under the Development Consent (DA-494) and the EIS for crane height, light spill and bird management. During the monitoring period (2018) there were no reported incidents of aviation impacts or aviation requested management of birds.
Trend / key management implications	**Terminal Lighting** Maritime Order 32 Schedule 1 (2) … lighting requires adequate lighting during loading and unloading activities. In some cases, the ship will be unloaded / loaded at night and require sufficient lighting to undertake the operations. When vessels are not under stevedore operations, the quay crane lights (except the beacon lights) will be switched off in order to minimise the light glare or distraction to aircraft pilots. **Bird Management** Where containers have leaked grain, the grain is swept up as soon as practicable.
Implemented / proposed management actions	Vessels are generally berthed facing west, unless otherwise directed to face east by the harbour pilot reducing the light to surrounding residents and nearby aircraft. Patrick personnel are required to report any aviation hazards or the presence of nesting or injured wildlife, including any eggs. Patrick has adopted the following measures to discourage bird attraction to the terminal: • No eating is permitted outside of the building; • Use of enclosed rubbish bins to reduce the risk of attracting birds; • Control of littering through signage, induction training and regular tool box talks; • The design of rooves and guttering of terminal buildings to deny birds the opportunities to roost and make nests. During 2019 Patrick will continue to trial LED lights on the underside of the quay cranes boom/beams with the aim to improve efficiency.

5.8 Community Information Complaints Handling

Development Consent DA 494	C3.1
Development Consent DA 453	3.63, 3.64,
EPA Licence 6962	M2.1, M2.2, M2.3, M2.4, M3.1, M3.2 and M3.3
EIS Prediction & Conclusion	22.5.2

Performance during the reporting period	During 2018 there were three (3) public comments, inquires and complaints received by Patrick via the EPA and NSW Ports (refer to Section 7 – Public Comments, Inquiries and Complaints Register of this AEMR). None of those received could be attributed to Patrick's operations. The quarterly Community Feedback Reports are available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting Each report includes the required information as per the two development consents. During 2018 the role of Environment Representative (as per DA 494, condition C4.3) for Patrick was fulfilled by Marie Gibbs, Patrick ESC Manager and the appointed Environmental Representative.
Trend / key management implications	The graph below shows the types of community feedback received and the month the complaint was reported to Patrick for the reporting period (2018). **Figure 5.8A:** Community complaints received attributed to Patrick's operations in 2018



Implemented / proposed management actions	Patrick operates a toll-free phone number (02) 9304 0308 solely for the community to use to contact Patrick with any comments, inquiries and/or complaints. The phone number is operational 24 hours 7 days a week. The phone number is tested weekly to ensure it is operational. The phone number is displayed on the front fence next to Patrick's Port Botany Terminal B105A gate and on Patrick's website http://www.patrick.com.au/environment-sustainability In September 2017 Patrick's Environmental Representative advised the PBCCC of the new phone number; this was recorded in the meeting minutes. Patrick monitors all community concerns / enquires / feedback and complaints and responds to the parties involved. All public enquires are logged in the site Public Comment, Inquires & Complaints Register attached to the site Environmental Register, and details of the findings and actions taken by Patrick area also recorded. Each event is entered into Patrick's HSE database and relevant correspondence attached. Any complaints received are reported as part of the daily, weekly and monthly environmental report.

5.9 Community Consultative Committee

Development Consent DA 494	C3.2 and C3.3
Development Consent DA 453	N/A
EPA Licence 6962	N/A
EIS Prediction & Conclusion	N/A
Performance during the reporting period	In September 2013, the Port Botany Community Consultative Committee was combined with the Port Botany Neighbouring Liaison Group to create the Port Botany Community Consultative Committee (PBCCC). Members of the PBCCC includes members from the local Port Botany community, tenants of Port Botany, local council, NSW Ports, EPA, etc. The chairperson is Roberta Ryan, and the minutes are taken by Sandra Spate. The Patrick representative at the PBCCC meetings is Marie Gibbs (ESC Manager and the appointed Environmental Representative). Patrick's representative attended the four PBCC meetings held during the reporting period (2018): • 6 February 2018 – held at Hutchison Ports • 1 May 2018 – held at NSW Ports • 7 August 2018 – held at Hutchison Ports • 13 November 2018 - – held at Hutchison Ports
Trend / key management implications	No trend / key management implications.
Implemented / proposed management actions	The Patrick appointed Environmental Representative (Marie Gibbs – ESC Manager) will continue to attend the PBCCC meetings. As part of the meeting agenda Patrick provides updates as required/requested.

5.10 Incident Reporting

Development Consent DA 494	C2.20, C4.1
Development Consent DA 453	3.52
EPA Licence 6962	R2.1, R2.2, R3.1, R3.2, R3.3 and R3.4
EIS Prediction & Conclusion	28.10.1 and 32.1

Performance during the reporting period	In 2018 there were 60 'environmental' related events (refer to Section 10 of this AEMR), of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident and one of these was classified as a minor water pollution incident. On 9 September 2018 at Berth 7 (covered by DA 453) a quay crane's waterside rail brake ruptured due to wear/tear and leaked oil out on to the wharf. The oil leaked into the high voltage cable trench, crane rail and surrounding wharf line. The majority of the oil leak was contained within the confines of the trenches and it is estimated a small amount could have entered the bay. Maintenance attended and put down absorbent material to contain the leak, absorbent booms were placed in the water between the wharf and vessel to remove any oil which may have entered the bay. A new hose was made and fitted to replace the damaged hose. Hydrawash attended and cleaned the affected area. Patrick self-reported to the EPA (EPA -Ref. 12449-2018) and DPE, written reported issued. Nil impact to people, nil apparent impact to the environment. The remaining events were contained within the site and cleaned up without any impact to the environment and have been classified as 'near miss - environmental'. Public comments, inquires or complaints are reported separately, refer to Section 7. **Actions from 2017 Annual Review** (refer to Section 6) *8/2017 & 17/2017 - Patrick to ensure the incident reporting matrix is updated, and key personnel are inducted on the incident reporting process.* The site incident reporting matrix was updated and reissued April 2018 and reviewed with all shift and stevedoring managers on site.
Trend / key management implications	Engineering & Maintenance (E&M) Manager identified controls for key leak sources to reduce the risk of leaks; personnel allocated to progress. As per the Escalation Matrix, when Patrick notifies the EPA of an actual or potential incident via the Environment Incident Reporting Line ensure this triggers notification to the DPE (via email) at the same time (within 12 hrs (DA 494) and 24 hrs (DA-453)).
Implemented / proposed management actions	The OEMP review/update includes the Emergency Response Plan (ERP), and Escalation Matrix and circumstances for notifying regulatory agencies. Included is additional coaching of Operations and Maintenance frontline managers as to use the Escalation Matrix to contact regulatory authorities.

5.11 Environmental Training

Development Consent DA 494	C4.4
Development Consent DA 453	3.62
EPA Licence 6962	N/A
EIS Prediction & Conclusion	32.2.4
Performance during the reporting period	Environmental training commences when new employees starts at the terminal in the form of a Site Induction, which is conducted during their first to two weeks of employment at Patrick. Specific training in mobile plant and equipment operation for personnel in Operations and Maintenance roles incorporates Standard Operating Procedures or Job Safety Analysis, environmental controls, emergency and evacuation procedures that Patrick has implemented at the terminal. Training assessment and Verification of Competency is completed prior to any worker being deemed competent. Patrick's Contractor Site Induction is provided to all contractors and service providers prior to them starting work at the terminal. Contractors and Service Providers are also required to supply Safe Work Method Statements (SWMS) and complete the Permit to Work process prior to starting any activity on the terminal. The appropriate High-Risk Work Licence associated with any work to be undertaken (e.g. confined space, working at heights, forklift, etc) will also be reviewed by Patrick's Facilities Manager and/or technical specialist responsible for the Contractor or Service Provider. During 2018, 95% (330) of Patrick's employees based at the Port Botany Terminal have completed the Site Induction Program. The remaining 6% are employees on long term absences. Patrick conducted a scheduled an emergency drill on 30 October 2018. The emergency drill scenario was a hazardous container on fire aboard a vessel alongside Patrick's terminal. In 2018, Patrick personnel involved in the handling of dangerous goods (i.e. shift and yard managers, stevedoring managers, rail coordinators and tower and senior clerks) involved with the handling of dangerous goods have completed the initial two-day Maritime General Awareness & Maritime Function Specific training course (AMSA accepted DG Training Course based on based on the current IMDG Code Amendment 38-16, which came into force on 1 January 2018 for the next two years). Training was provided by All Modes Dangerous Goods Training (AMSA Course Approval No. 5111). All new Patrick employees involved in the handling of dangerous goods are required to complete the initial 2-day training course. The terminal issued an annual statement of compliance for 2018 to the Port Authority of NSW (Dangerous Goods Unit) on the 9 January 2019.

Performance during the reporting period	**Actions from 2017 Annual Review** (refer to Section 6) *1/2017 - Patrick to ensure the site induction is revised to include more specific environmental training e.g. toolboxes or similar, covering topics such as bunding, spill response, noise mitigation/controls etc.* The site induction was updated and includes details of the consents and actions to be taken by employees and contractors. The site induction was reissued in June 18. Tool box talk topics (noise minimisation and reducing litter to the bay) have been rolled out to the Operations team. *10/2017 - Patrick to ensure the site induction is updated to include noise control measures (June 2018) and reissued.* The site's incident reporting matrix was updated, and key personnel were inducted on the reporting process.
Trend / key management implications	Following the emergency drill on 30 October 2018, Patrick identified several corrective actions relating to a review of the Emergency Response Plan (ERP). The terminal's ERP is currently under review with an anticipated issue date of 31 March 2019.
Implemented / proposed management actions	Refresher training in the IMDG Code Amendment 39-18 is effective from January 1, 2019 and mandatory from January 1, 2020). The 1-day refresher training is planned in the next reporting period for all Patrick employees involved with handling dangerous goods and who have completed the initial 2-day training course. Roll out Toolbox Training Talks covering key issues such as noise, littering and leaks/spills. Refresh members of the Emergency Control Organisation on the revised ERP.

5.12 Environmental Auditing

Development Consent DA 494	C4.5
Development Consent DA 453	3.53 and 6.7
EPA Licence 6962	N/A
EIS Prediction & Conclusion	N/A

Performance during the reporting period	As per development consents – DA 494, condition C4.5 an Annual Independent Environmental Audit, and DA 453, condition 6.7 a three-yearly audit was undertaken. The 2018 audit was carried out by an independent auditor (Steve Fermio, WolfPeak Pty Ltd) approved by the Secretary and conducted on 17 January 2019. The final audit report was sent to NSW Ports and DPE on the 14 February 2019 and satisfies condition C4.5 and 6.7. Copies of the Annual Independent Environmental Audits are located on Patrick's website – http://www.patrick.com.au/environment-monitoring-reporting. As per development consent DA 453, condition 3.53 the 3-yearly hazard audit was carried out by an independent auditor (Karin Nilsson, Planager Pty Ltd) approved by the Secretary in 2017. A copy of the final report was emailed to the DPE on the 23 October 2017. This report forms the 2018 AEMR has prepared in compliance with DA 494 (C4.2) Annual Environmental Management Report, and DA 453 (6.6) Annual Compliance Report. This AEMR has been prepared in accordance with NSW Government Annual Review Guideline (Post-approval requirements for State significant mining developments, October 2015). Copies of the Annual Environmental Management Reports are available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting. Together the annual audit and annual environmental management report make up the annual review. Internal audits of Patrick's environmental management system were carried out in 2018. **Actions from 2017 Annual Review** (refer to Section 6) *12/2017 - Patrick to ensure the 2018 Independent Environment Audit report satisfies the 3-year requirement (as per DA 453, 6.7), and issue the 2018 Audit to NSW Ports and DPE.* The audit covers the 3-year audit requirement (DA 453, 6.7), was issued to NSW Ports and DPE on 14 February 2019 and posted on Patrick's website http://www.patrick.com.au/environment-monitoring-reporting.
Trend / key management implications	Specific trends identified from the 2018 annual review – include the Operational Environmental Management Plan (OEMP), supporting documents, reporting and training.
Implemented / proposed management actions	A review and update of the OEMP and sub-plans is underway due 31 March 2019. Post review by NSW Ports, the OEMP will be submitted to the DPE for approval. Modification to DA 453 has been discussed internally and in brief with NSW Ports and DPE. A proposed consolidation document has been drafted. Patrick is waiting for details of potential major upgrade to rail area which may necessitate modification to approval conditions that could also address this finding in a consolidated manner.

6. Actions required from previous Annual Review

The table below identifies any actions required as an outcome of the previous annual review (2017) i.e. independent audit and annual environmental management report. It includes any actions that have been undertaken, which actions have been completed, and those which remain open.

Table 6A: Actions required from the 2017 Annual Review – Completed/Closed

Audit/ Review No.	Cond. No.	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Patrick	Who/ When	Where discussed in 2018 AEMR
STATUS - 2017 ANNUAL REVIEW FINDINGS						
1/2017	DA 453, 1.9	Revise and re-issue the site induction package to include more specific environmental training, toolbox talks or similar covering topics such as bunding, spill response, noise mitigation etc.	Auditor	Site induction was updated to include details of the consents and actions to be taken by employees and contractors. Site Induction was reissued (Jun-18).	CLOSED	Section 5.11
2/2017	DA 453, 3.23	Patrick will continue to cancel slots to remove congestion on Ramp and monitor situation.	Auditor	This finding is not relevant to DA 453 as Ramp D is actually covered by the Port Botany Expansion approval which permits such parking.	CLOSED	Section 5.4
4/2017, AEMR #9	DA 453, 3.40	Review at the 2018 audit [the quantity of hazardous and/or industrial and/or Group A waste generated per year].	Auditor, Patrick	The site Waste Register included records of waste oil (i.e. main hazardous waste generated at the site). Total amount generated for 2018 was approximately 40 tonnes, which is under the limit.	CLOSED	Section 5.5
5/2017, AEMR #10	DA 453, 3.41	Review at the 2018 audit [the quantity of hazardous and/or industrial and/or Group A waste stored on the premises a at any one time].	Auditor, Patrick	The site Waste Register indicate the maximum amount of waste oil stored on site was approximately 11 tonnes in March 2018 which is well under the limit.	CLOSED	Section 5.5
6/2017, AEMR #11	DA 453, 3.44	Update the site induction to include recycling practices on site.	Auditor, Patrick	Recycling is addressed in the revised site induction – June 2018	CLOSED	Section 5.5

Audit/ Review No.	Cond. No.	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Patrick	Who/ When	Where discussed in 2018 AEMR
STATUS - 2017 ANNUAL REVIEW FINDINGS						
7/2017	DA 453, 3.49	Patrick to clarify with NSW Ports what compliance with this condition looks like prior to 2018 audit.	Auditor	As a reference, during the 1995/1996 period 825 tonnes (average value) of Class 2.3 Dangerous Goods were transited through PB. From 1 September 2017 to 31 August 2018 there were 163 tonnes of Class 2.3 dangerous goods transited through Berths 7, 8 and 9 of Patrick's terminal which is well under the 825 tonnes limit required under this condition. (For the same period a total of 253 tonnes of Class 2.3 transited thru the entire terminal (including Berth 6)).	CLOSED	Section 5.6
8/2017, 17/2017, AEMR #5	DA 453, 3.52 DA 494, C4.1	Update the incident reporting matrix and induct key personnel on the reporting process.	Auditor, Patrick	Updated the site's incident reporting matrix (April 2018) and reviewed with all shift and stevedoring managers.	CLOSED	Section 5.10
9/2017, AEMR #12	DA 453, 3.60	Review extent of area for landscape [under Ramp D], if included planting native plants indigenous to the area/soil type and manage any planting.	Auditor, Patrick	The lease for the area of land under Ramp D (also known as 'The Undercroft') has been cleared of all storage items, and the land transferred from Patrick to NSW Ports (14 September 2018) and is now under the latter organisation's control.	CLOSED	Section 5.5
10/2017, AEMR #7	DA 453, 3.62	Revise the site induction package to include role specific noise control training. Induct key personnel on the noise control methods.	Auditor, Patrick	The site induction was updated to include the noise control measures (June 2018) and reissued.	CLOSED	Section 5.11
12/2017	DA 453, 6.7	Closed with submission of this audit report.	Auditor	Closed with submission of the 2018 Independent Environment Compliance Audit report which satisfies the 3-year requirement. Issued to NSW Ports and DPE on 14 February 2019.	CLOSED	Section 5.12

Audit/ Review No.	Cond. No.	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Patrick	Who/ When	Where discussed in 2018 AEMR
STATUS - 2017 ANNUAL REVIEW FINDINGS						
13/2017, AEMR #14	DA 453, 7.4	Complete current site chemical storage audit and management review with Maintenance.	Auditor, Patrick	The Maintenance Department completed the chemical storage audit. The audit found bunding of liquids in place and routine inspections of the chemical store are undertaken.	CLOSED	Section 5.6
14/2017, AEMR #15	DA 453, 7.5	Confirm waste oil has been disposed of appropriately and stored in an under covered location.	Auditor, Patrick	Oil and other chemicals stored in 'The Undercroft' have been removed, the area cleared and after inspection it was handed back to NSW Ports (14 September 2018).	CLOSED	Section 5.5
15/2017, AEMR #16	DA 453, 7.19	Patrick to seek modification to remove this condition from the consent.	Auditor, Patrick	Trial of stencil signage next to all stormwater drains is currently underway	CLOSED	Section 5.2
20/2017	OEMP, Table 8	The Kalmar Straddle Carriers currently parked in an uncovered area of The Knuckle are to be relocated to a covered area when repairs are scheduled to be carried out.	Auditor	Manually operated straddles have been relocated to a bunded area behind Maintenance.	CLOSED	Section 5.2
22/2017	ONMP, Section 3.2.4	Patrick to review [noise (acoustics) wall] further and discuss with NSW Ports and update ONMP as required	Auditor	A noise attenuation wall was constructed by Hutchison Ports and is located within Hutchison Ports rail site positioned between Hutchison's rail siding and the Penrhyn Estuary. Patrick's Operational Noise Management Plan (ONMP) is currently under review (due 31 March 2019).	CLOSED	Section 5.3
AEMR #3, 2016-AEMR #2	DA 494, C2.17	Investigate locking specific Class / UN cargo from being handled/stored in Berth 6.	Patrick	Clarified with the issue of DA 494 MOD 16. On 26 September 2018 Patrick reported to NSW Ports that 8 containers of Dangerous Goods (Class 2.3) transited through Patrick's Berth 6 (covered by this consent DA 494) for the period 1 September 2017 to 31 August 2018.	CLOSED	Section 5.6

Audit/ Review No.	Cond. No.	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Patrick	Who/ When	Where discussed in 2018 AEMR
STATUS - 2017 ANNUAL REVIEW FINDINGS						
AEMR #4	DA 494, C2.18	Patrick to clarify with NSW Ports and/or DPE what compliance with this condition looks like.	Patrick	Clarified with the issue of DA 494 MOD 16. On 16 October 2018 NSW Ports reported to the DPE the cumulative data from Patrick and Sydney International Container Terminal. The letter stated the total volume of 21 containers of packaged dangerous goods materials (Classes 1.1, 1.2, 2.3, & 8) is well below the defined reporting threshold limit of 157 containers as defined in Table 1, Schedule 4 of DA 494 MOD 16.	CLOSED	Section 5.6
AEMR #8	DA 453, 3.19	Arrange routine inspections of markings on internal roadways.	Patrick	Included as part of the quarterly environmental inspections. Plans are in place to repaint the Truck Grid, and mark areas not previously painted.	CLOSED	Section 5.4
AEMR #18	PBE EIS, 20.8.4	Revise the OEMP to include a Feral Animal Management Plan (FAMP).	Patrick	A draft Feral Animal Management Plan (FAMP) has been prepared.	CLOSED	App. C

Table 6B: Actions required from previous Annual Review 2017 – Remain Open

Audit/ Review No.	Cond. No	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Operator	Status	Who/When	Where discussed 2018 AEMR
STATUS - 2017 ANNUAL REVIEW FINDINGS							
3/2017, 16/2017, 23/2017, AEMR #2	DA 453, 3.33 DA 494, C2.14 SMP, Various	Document the stormwater collection/treatment system and the capacity of critical controls, include a figure / plan. Induct key personnel into the stormwater management system.	Auditor, Patrick	Stormwater Management Plan currently being updated as part of the OEMP review.	OPEN	ESC Manager, M. Gibbs 31-Mar-19	5.2, 5.11
11/2017, AEMR #13	DA 453. 5.7	This and other redundant conditions of the approvals should be removed if possible. This would benefit and assist the compliance task by simplifying and streamlining the conditions that really matter to protecting the environment and community from what is now an integrated Terminal operation.	Auditor, Patrick	Modification discussed internally and in brief with NSW Ports and DPE. Patrick has prepared a draft proposed consolidation document and is now waiting for details of potential major upgrade to rail area which may necessitate modification to approval conditions that could also address this finding in a consolidated manner.	OPEN	ESC Manager, M. Gibbs Ongoing	5.12
18/2017, 19/2017	DA 494, C4.4 OEMP, Section 4.4	Revise and re-issue the site induction package to include more specific environmental training, toolbox talks or similar covering topics such as bunding, spill response, noise mitigation etc. Update the new employee and relevant contractor inductions and environmental requirements. Initiate the provision of environmental training at toolbox talks or prestart meetings as required under section 4.4 – Environmental Training – of the OEMP, was provided.	Auditor	Site induction has been significantly revised in June 2018. Draft Toolbox Training Talks covering key issues such as noise, littering and leaks/spills. OEMP currently being updated, scheduled for completion 31 March 2019.	OPEN	ESC Manager, M. Gibbs 28-Feb-19 COMPLETED 26-Feb-19	5.11

Audit/ Review No.	Cond. No	Action required from Patrick's previous Annual Review - 2017 (i.e. Independent Audit & AEMR)	Requested By	Action taken by the Operator	Status	Who/When	Where discussed in AEMR 2018
STATUS - 2017 ANNUAL REVIEW FINDINGS							
21/2017, AEMR #1	OEMP, Various ONMP, Various, DA 494, C2.4	All containers of waste oils, fuels and other liquids at Ramp D, are to be placed in bunded areas as soon as possible Closed – action has been completed prior to the issue of this report (as per After Photos), and areas are part of routine inspections. Review of the OEMP and all of its sub plans should be completed as soon as possible.	Auditor, Patrick	All containers of waste oils, fuels and other liquids under Ramp D have been removed and placed in bunded areas for disposal. Closed – action was completed September 2018. Review of the OEMP and all of its sub plans is scheduled for completion by 31 March 2019 which is also a requirement of DA 453.	OPEN	ESC Manager, M. Gibbs 31-Mar-19	5.12
AEMR #6	DA-494, C4.2 DA 453, 6.7	Prepare subsequent AEMRs within 60 calendar days after the end of the reporting period as per NSW Government – Annual Review Guidelines, Post-approval requirements for State significant mining developments, October 2015.	Patrick	This report forms the 2018 AEMR and has been prepared as per the NSW Government – Annual Review Guidelines, Post-approval requirements for State significant mining developments, October 2015.	OPEN	ESC Manager, M. Gibbs 28-Feb-19	5.12
AEMR #17	DA 453, 7.25	Locate a copy of the Energy Efficiency Compliance Report.	Patrick	Nil Energy Efficiency Compliance Report identified. Either locate or repeat/ undertake an Energy Efficiency Compliance Report.	OPEN	ESC Manager, M. Gibbs 31-Mar-19	Appendix B, 7.25

7. Community

7.1 Public Comments, Inquiries and Complaints Register

Table 7: Public Comments, Inquiries and Complaints Register: 1 January 2018 to 31 December 2018

No.	Date of Notification	Time of Notification	Direct or Indirect Feedback	Method (Means)	Type of Feedback	Details of Comment, Inquiry or Complaint (if none "nil")	Nature of Comment, Inquiry or Complaint	Details of Comment, Inquiry or Complaint Received	Attributed to Patrick Operations (Yes / No)	Action taken by Patrick (if nil – state reason)	Follow up by Patrick
1	28-Feb-18	12:23 hrs	Indirect	Email	Negative	EPA received 3 calls, contacted NSW Ports, who contacted port operators including Patrick	Noise	23-25 February 2018: Night Separate noise complaints were received from three (3) Matraville residents. Noise description: A loud droning, continuous industrial noise, sounded like an engine or heavy machinery, possibly something that was not functioning properly.	NO	Patrick's Operations, E&M, and Automation & Landside Managers – reported normal operations and maintenance activities (i.e. nothing out of the ordinary) over the past weekend. Automation & Landside Manager advise there were no trains at Patrick's rail siding over that weekend as there was track possession for works.	Information provided to NSW Ports.
2	28-Feb-18	12:28	Indirect	Email	Negative	NSW Ports received complaint from the vessel MSC STELLA	Water	Discoloured water, Brotherson Dock	NO	Patrick's Operations, E&M, and Automation & Landside Managers – reported normal operations and maintenance activities (i.e. nothing out of the ordinary) on 26 February 2018. Operations Manager advised the MSC STELLA which was berthed alongside Patrick's terminal had not reported their observation to Patrick.	Information provided to NSW Ports

No.	Date of Notification	Time of Notification	Direct or Indirect Feedback	Method (Means)	Type of Feedback	Details of Comment, Inquiry or Complaint (if none "nil")	Nature of Comment, Inquiry or Complaint	Details of Comment, Inquiry or Complaint Received	Attributed to Patrick Operations (Yes / No)	Action taken by Patrick (if nil – state reason)	Follow up by Patrick
3	29-Nov-18	14:02	Indirect	Phone call	Negative	NSW EPA received a complaint from a resident ex Moorina Av, Matraville	Noise	EPA's senior officer advised over the phone – the noise was described as fork trucks beeping all the time.	NO	**Patrick could not attribute the observed noise to its operations – based on:** • The site uses 2 fork trucks (CargoLink area) • Site is located on the opposite side of another port operator's empty container park which is in between Patrick and Moorina Avenue, Matraville.	Followed up with site management to identify any Patrick equipment with reversing alarms not fitted with a low tonal (quacker) alarm. If not, then follow up.

8. Independent Environmental Audit

As per development consents - DA-494, C4.5 an Annual Independent Environmental Audit, and DA-453, 6.7 a three-yearly audit was undertaken. The 2018 audit was carried out by an independent auditor (Steve Fermio, WolfPeak Pty Ltd) approved by the Director-General and conducted on 17 January 2019.

Copies of the audits are located on Patrick's website – http://www.patrick.com.au/environment-monitoring-reporting.

8.1 Compliance Status

Table 8A: 2018 Audit Findings - Non-Compliance (2) and Corrective Actions

Audit Item No.	Cond. No.	Details of Condition / Requirement	Comments, observations, discussion, evidence, supporting documentation	Proposed Action	Who By	When
DA 494 – Port Botany Expansion Approval						
There were no findings made against the conditions of DA 494 during this audit.						
DA 453 – Patrick Port Botany Redevelopment Approval						
2/2018	7.25	An Energy Efficiency Compliance Report shall be prepared within 15 months of the issuing of the occupation certificate. The Report shall certify that energy efficiency measures have been installed and verify that the building's energy performance complies with Councils Energy Efficiency DCP. A copy of the Report shall be made available to Council on request.	In Patrick's 2017 AEMR it as observed that a copy of the Energy Efficiency Compliance Report (EECR) could not be located. An action has been assigned to have the Report either located or repeated/undertaken (email evidence sighted) by 31 March 2019.	Either locate or repeat/ undertake an EECR.	ESC Manager, M. Gibbs	31-Mar-19
EPA Licence No. 6962:						
3/2018	L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the *Protection of the Environment Operations Act 1997*.	A small oil spill is likely to have occurred on 9 September 2018 as a result of gantry crane hydraulic hose rupture. Spill clean-up equipment including absorbent booms were deployed into the water and a small amount of oil collected. The incident was reported to EPA and DPE.	Note	NA	NA

Table 8B: 2018 Audit Findings – Observation (1) and Corrective Actions

Audit Item No.	Cond. No.	Details of Condition / Requirement	Comments, observations, discussion, evidence, supporting documentation	Proposed Action	Who By	When
Development Consent DA-453:						
1/2018	3.33	Except as may be expressly provided by a licence issued under the *Protection of the Environment Operations Act 1997* in relation of the development, section 120 of the *Protection of the Environment Operations Act 1997* shall be complied with and in connection with the carrying out of the development.	A minor water pollution incident on 9 September 2018 was reported to the EPA and DPE. It is understood that the EPA has not taken any regulatory action in response to this incident. *NB: [Auditor] has recorded this as a non-compliance against Condition L1.1 of the EPL.* For noting, no further action required.	For noting, no further action required.	NA	NA

9. Incidents during the reporting period

In 2018 there were 60 'environmental' related events, of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident and one of these was classified as a minor water pollution incident:

- On 9 September 2018 at Berth 7 (covered by DA 453) was reported to the EPA and DPE.

The remaining events were contained within the terminal area and cleaned up without any discharge to the environment and have been classified as 'near miss - environmental'. Note: Public comments, inquires or complaints are reported separately, refer to Section 7.

Table 9: Environmental Related Incidents (including Near Misses) Reported in 2018

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
1	3-Jan-18	Land (Potential)	Rail reach stacker leaked hydraulic oil onto the sealed roadway. Nil entry into stormwater drains in the vicinity.	Maintenance team attended, placed absorbent material onto the leaked oil. Workshop sweeper cleaned up absorbent material and scrubbed roadway. **NEAR MISS:** INC0001983	Closed
2	10-Jan-18	Land (Potential)	Auto Strad leaked hydraulic brake fluid onto the sealed roadway at the Truck Grid. Nil entry into stormwater drains in the vicinity.	Maintenance team attended and the leak was cleaned up using absorbent material. Auto Strad returned to Maintenance for inspection/repair. **NEAR MISS:** INC0002023	Closed
3	15-Jan-18	Water (Potential)	During the initial vessel inspection, the safety facilitator found a trans-shipment hazardous container (Class 8, UN2794) leaking. Nil entry into stormwater drains in the vicinity.	Shipping line was notified of the leak. Shift Manager evacuate the area, installed an exclusion zone and contacted emergency services. Fire and Rescue NSW Hazmat unit attended, opened the container and found - DG cargo - batteries, aerosols and paint inside the door and leaking cargo (chocolate syrup (foodstuff)) at rear of container. Area aboard the vessel was cleaned up. ESC Manager self-reported to the EPA (C00612-2018) and DPE. Nil harm to people and environment. **NEAR MISS:** INC0002032	Closed
4	18-Jan-18	Land (Potential)	Small diesel spill found in Truck Grid likely from a truck. Nil entry into nearby stormwater drains.	Maintenance attended, leak cleaned up using absorbent material. **NEAR MISS:** INC0002050	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
5	24-Jan-18	Water (Potential)	Ship Team Leader discharging out- of-gauge cargo from a vessel noticed a resin-like odour in the area. Contacted Shift Manager who inspected the area and confirmed an odour coming from a vent ex under deck.	Shift Manager installed an exclusion zone, FRNSW Hazmat unit attended inspected/monitored air in area - nil hazardous material identified, reduced exclusion zone to 25m. Shift Manager identified 2 hazardous (Class 9, UN3082 and Class 3, UN1866) containers in vicinity of reported odour. FRNSW Hazmat Patrick to inspect containers prior to discharge, nil leaking containers located. Final report sent via email to regulators. Landside arranging with transport operators to remove containers from the terminal. Self-reported to EPA Incident Reporting Line, email to EPA (151701). Nil harm to people and environment. **NEAR MISS:** INC0002072	Closed
6	12-Feb-18	Land (Potential)	Reach stacker leaked hydraulic oil onto sealed roadway. Nil stormwater drains in the vicinity.	Maintenance team attended, eliminated any oil pressure in hydraulic system prior to moving hoses. Identified a damaged hose, relocated reach stacker without pressurising this part of the system, repairs carried out Oil spill on ground was contained and cleaned up with absorbent material. **NEAR MISS:** SE012521-HZ001	Closed
7	27-Feb-18	Land (Potential)	Auto Strad broke down in Auto Yard with a damaged spreader hydraulic ram. Nil entry into the nearest stormwater drain (approx. 20 m).	Maintenance team attended, cleaned up oil that had leaked onto the sealed ground using absorbent material. Auto Strad relocated for repairs. **NEAR MISS:** INC0002207	Closed
8	3-Mar-18	Land (Potential)	High winds sprayed oil/water from the collection tray at the top of straddles parked in behind Berth 6, onto the sealed ground. Nil entry into stormwater drains in the vicinity.	Maintenance Team attended, used absorbent material to clean up the oil/water. The area was further cleaned by Hydrawash (high-pressure water vacuum cleaning system). **NEAR MISS:** INC0002234	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
9	7-Mar-18	Land (Potential)	Auto Strad in the Auto Yard with low hydraulic oil was identified as leaking onto the sealed roadway. A small volume of oil was found in the nearby strip trench, with no hydraulic load the oil had remained in the strip trench.	Maintenance shut down the Auto Strad, placed absorbent material around the Auto Strad and between it and the strip drain nearby. Contractor and ESC Manager attended and inspected the area and strip trench. The area and trench drain were cleaned by Hydrawash. Patrick self-reported to EPA (NSW EPA #C03156-2018) and email to regulators - nil harm to people and environment. **NEAR MISS:** INC0002259	Closed
10	10-Mar-18	Water/Land (Potential)	A shipping line reported (9-Mar-19) an inbound vessel had aboard a leaking hazardous container (Class 9, UN3082).	On receipt of this information Patrick advised FRNSW Hazmat unit (and regulatory agencies) a leaking hazardous container aboard inbound vessel was coming alongside on the 10-Mar-19. On arrival of the vessel, FRNSW Hazmat unit attended, boarded the vessel and inspected the leaking container (#1), and found a second hazardous container (#2) leaking (Class 8, UN 1778). Under FRNSW Hazmat direction Patrick removed container #1 to Patrick's spill trailer and relocated to A-Block, where a plastic skirt was placed around the container before lifted onto a temporary plastic bunded area. The next day (11-Mar-18) under the direction of FRNSW Hazmat Patrick lifted container #2 FRNSW Hazmat unit wrapped a plastic skirt around the container base and it was placed on. Patrick self-reported via EPA's pollution line (EPA #152850) and emailed other regulators. Nil harm to people and environment. **NEAR MISS:** INC0002272	Closed
11	16-Mar-19	Land (Potential)	During an inspection of export flat racks in the OOG area 2 spiders (redbacks) were found on the cargo.	Pest controllers attended - found 3 spiders and an old wasp nest. Patrick reported to EPA (EPA -Ref. 152962) and followed with a report to the EPA/DPE and regulatory agencies. Nil harm to people and environment. **NEAR MISS:** INC0002296	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
12	16-Mar-19	Land (Potential)	A reach stacker blew a hydraulic hose on the way causing oil to be spilled on the sealed roadway, nil stormwater drains in vicinity.	Maintenance attended and placed absorbent material on the affected area, Hydrawash attended and cleaned the area. Patrick reported to EPA (EPA -Ref. 152962) and followed with a report to the EPA, DPE and NSW Ports. Nil harm to people and environment. **NEAR MISS:** INC0002297	Closed
13	27-Mar-18	Water/Land (Potential)	A shipping line reported (26-Mar-19) an inbound vessel had aboard a leaking non-hazardous container.	Patrick contacted EPA, followed up with an email to EPA and NSW Ports. On arrival of the vessel marine surveyors boarded the vessel inspected the leaking non-hazardous container (cargo identified as 'ghee') and a further 7 containers affected. Patrick removed the leaking container to the spill trailer on the wharf. The consignee of the cargo engaged a contractor who leaned the containers aboard the vessel and clean the leaking container. and followed with a report to the EPA, DPE and NSW Ports. Nil harm to people and environment. **NEAR MISS:** INC0002357	Closed
14	31-Mar-18	Land (Potential)	During an inspection of the Auto Yard several non-hazardous containers containing wet hides were found to be leaking water. Nil stormwater drains in the vicinity.	Maintenance team attended and used absorbent material to clean the area. **NEAR MISS:** INC0002344	Closed
15	2-Apr-18	Air (Potential)	After two hazardous containers (Class 2.1, UN1001) containing Flammable gas were loaded on the vessel, the Ship Team Leader heard a loud hissing from one of the containers.	As a precaution people evacuated from the area; FRNSW Hazmat unit attended and tested around the container. Under the direction of HAZMAT Patrick relocated the container to the wharf where it opened by FRNSW Hazmat and vented, resealed and re-stowed aboard the vessel. Patrick contacted EPA (EPA -Ref. 153527) and a report to the EPA, DPE and NSW Ports. Nil harm to people and environment. **NEAR MISS:** INC0002354	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
16	20-Apr-18	Land (Potential)	Auto Strad with low hydraulic oil pressure inspected by Maintenance team found a wheel leaking oil on the sealed roadway/yard. Nil entry into stormwater drains in vicinity.	Maintenance team attended, placed absorbent material onto the oil and cleaned the area. The Auto Strad was recovered for repairs. **NEAR MISS:** INC0002417	Closed
17	17-May-18	Water/Land (Potential)	Safety Facilitator boarded a vessel to conduct the arrival safety inspection, the ship's crew reported a non-hazardous container was leaking.	The leaking non-hazardous container was discharged to the spill trailer. Shipping line arranged clean-up of the vessel Nil harm to people and environment. Patrick contacted EPA (C06776-2018) and a report to the EPA, DPE and NSW Ports. **NEAR MISS:** INC0002518	Closed
18	18-May-18	Land (Potential)	Contractor operating a scissor lift inside the Maintenance workshop when all functions were lost. Inspection was carried and identified a leak coming from the machine. No stormwater drains are located inside the workshop.	Based on a hydraulic hose /fitting having blown, the plant operator immediately stopped the machine and hydraulic pump. Maintenance team attended and the oil leak was contained using absorbent material and cleaned up. **NEAR MISS:** INC0002531	Closed
19	6-Jun-18	Land (Potential)	Reach stacker blew hydraulic hose. Leaked oil onto sealed ground. No storm drains in vicinity.	Machine operator stopped. Maintenance team attended and created a bund around the machine. Next shift Hydrawash attended to clean the affected area. **NEAR MISS:** INC0002613	Closed
20	7-Jun-18	Water/Land (Potential)	Shipping line reported a leaking non-hazardous container (containing olive oil) aboard a vessel.	On inspection the container was found to be no longer leaking. The container was discharged no leak found. **NEAR MISS:** INC0002642	Closed
21	15-Jun-18	Land (Potential)	Auto Strad blew a hydraulic hose in the Auto Yard and leaked oil onto the sealed roadway. Nil entry into the nearest stormwater drain approx. 50m away.	Auto Strad shutdown, area noded in Auto Yard to keep other Auto Strads from entering the affected area. Maintenance team attended, placed absorbent material onto the affected area and the area cleaned up **NEAR MISS:** INC0002667	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
22	24-Jun-18	Land (Potential)	Auto Strad leaked a small volume of diesel from the top of straddle during start up. No diesel went to stormwater drains in the vicinity.	Maintenance team attended and placed absorbent material on the affected area and cleaned up. The Auto Strad was repaired. **NEAR MISS:** INC0002969	Closed
23	2-Jul-18	Land (Potential)	Operations reported to Maintenance that 16T forklift had hydraulic oil leak from damaged hose.	Maintenance attended and found hoses for the side shift had rubbed through. Found hydraulic oil had leaded sprayed onto the Auto Strad cab. The Auto Strad was repaired and relocated to the workshop for cleaning. No drains were in the vicinity of the leak. **NEAR MISS:** INC0002737	Closed
24	7-Jul-18	Water/Land (Potential)	During twin loading two export grain containers the vessel's cell guides were hit damaging he containers and causing the cargo (wheat) to leaking into the vessel. Nil entry into water.	On returning the 2 containers to the wharf some gain leaked onto the sealed surface of the quay line as the containers were loaded onto the spill trailer. The wharf was cleaned up of loose grain. **NEAR MISS:** INC0002778	Closed
25	15-Jul-18	Water/Land (Potential)	A flat rack aboard a vessel was lifted by one end causing the cargo to fall into the vessel's hold in the vicinity of a tank-tainer (non-hazardous cargo – Palm Oil), unable to ascertain if the tank was damaged and leaking.	Marine surveyor attended and inspection of the damaged flat racks, and the nearby tank-tainer. No damage was sustained to the tank-tainer nor any indication of the tank leaking or having leaked. **NEAR MISS:** INC0002882	Closed
26	17-Jul-18	Land (Potential)	A small oil leak was found on a sealed area in the truck grids. The leak was suspected from an Auto Strad. Nil entry into stormwater drains within the vicinity.	Maintenance team attended, placed absorbent material to the affected area and cleaned the area with the workshop sweeper/washer. **NEAR MISS:** INC0002815	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
27	28-Jul-18	Water/Land (Potential)	A crane was loading 2 containers below deck of a vessel when the crane's spreader clipped the vessel's cell guide causing the two containers to wedge in cell guides and the crane's spreader to leak hydraulic oil onto the two containers immediately below the spreader and in to hold.	Maintenance team attended. Patrick personnel from inside/outside work cage cleaned up the leaked hydraulic oil from containers and the vessel's hold. **NEAR MISS:** INC0002892	Closed
28	30-Jul-18	Water/Land (Potential)	On 20-Jul-18 at the Fremantle terminal FRWA Hazmat unit attended and inspected a hazardous tank-tainer (Class 3, UN1247) which was suspected of leaking, nil readings were reported. During the voyage to Port Botany the vessel's chief officer was unable to confirm if tank-tainer leaking or not. 27-Jul-18 – Shipping line notified Patrick of the inbound vessel with a potential leaking tank-tainer	30-Jul-18 – the vessel came alongside Berth 7 at approx. 0500hrs; FRNSW Hazmat unit attended, inspected the affected tank-tainer and reported nil readings were recorded, no leak found from trans-tank. There was evidence of leak/staining on 2x general cargo containers and hazardous tank-tainer. The tank was discharged to the spill trailer for inspection, nil readings received. Nil harm to people and environment. **NEAR MISS:** INC0002874	Closed
29	10-Aug-18	Land (Potential)	A reach stacker blew a hydraulic oil hose leaked oil on the sealed of the rail yard.	Maintenance team attended, put down absorbent material and Hydrawash attended and completed the clean-up. **NEAR MISS:** INC0002921	Closed
30	15-Aug-18	Water/Land (Potential)	A quay crane's landside rail brake leaked hydraulic onto sealed surface of the wharf at 1360-1400 m mark. No oil entered into stormwater drains in the vicinity or the Bay.	Maintenance attended, placed absorbent material on the leaked oil and cleaned it up, and the rail brake was repaired. **NEAR MISS:** INC0002934	Closed
31	22-Aug-18	Land (Potential)	Auto Strad leaked hydraulic oil in the empty exchange area. Nil stormwater drains within the vicinity.	Maintenance attended, placed absorbent material on the leaked oil and cleaned it up, and repaired the hydraulic hose. **NEAR MISS:** INC0002970	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
32	27-Aug-18	Land (Potential)	Tele-Op incorrectly connected to the wrong Auto Strad and ran spreader into container on the back of a truck damage to the spreader which caused hydraulic oil to leak onto the sealed roadway. Nil stormwater drains within the vicinity.	Maintenance attended, placed absorbent material on the leaked oil and cleaned it up, and made repaired the hydraulic hose. **NEAR MISS:** INC0002992	Closed
33	28-Aug-18	Land (Potential)	A reach stacker leaked small volume of hydraulic fluid at the rail siding. Nil entry into nearest stormwater drain (15 m away).	Maintenance attended, placed absorbent material on the leaked oil and cleaned the area, and repaired the leaking hydraulic hose. **NEAR MISS:** INC0003000	Closed3
34	5-Sep-18	Land (Potential)	Auto Strad's left hand side steer deck leaked oil onto the seal roadway at the truck grid. Nil stormwater drains within the vicinity.	Maintenance attended, placed absorbent material on the leaked oil and cleaned the area. Repair work raised. Hydrawash cleaned the affected area. **NEAR MISS:** INC0003022	Closed
34	9-Sep-18	Water	Berth 7 - A quay crane's waterside rail brake ruptured due to wear/tear and leaked oil out on to the wharf. The oil leaked into the high voltage cable trench, crane rail, surrounding wharf line. The majority of the oil leak was contained within the confines of the trenches and it is estimated a small amount could have entered the bay.	Maintenance attended and put down absorbent material to contain the leak, absorbent booms were placed in the water between the wharf and vessel to remove any oil which may have entered the bay. A new hose was made and fitted to replace the damaged hose. Hydrawash attended and cleaned the affected area. Patrick self-reported to the EPA (EPA -Ref. 12449-2018) and DPE, written reported issued. Nil impact to people, nil apparent impact to the environment. **INCIDENT:** INC0003402	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
35	11-Sep-18	Land (Potential)	Auto Strad in the Launch Pad split a main oil hose in the engine bay, the leak was captured in drip tray, minimal overflow onto the sealed surface of the Launch Pad. Nil stormwater drains within the vicinity.	Maintenance team attended and put down absorbent material onto the affected area and replaced the oil hose on the Auto Strad. None of the spilled oil made its way beyond the Launch Pad, clear from any drainage point. **NEAR MISS:** INC0003054	Closed
36	14-Sep-18	Land/Water (Potential)	A quay crane lost long travel. Found main hydraulic oil tank low and LHS landside storm rail clamp thruster reservoir was overfilling, leaking oil onto the sealed surface on the landside part of the wharf. Nil stormwater drains within the vicinity, nil oil entered the Bay.	Maintenance team attended and put down put down absorbent material onto the affected area and put the crane out of service for repairs. Maintenance expedited an inspection of the ZPMC cranes stormwater rail clamp hydraulic oil systems. **NEAR MISS:** INC0003070	Closed
37	18-Sep-18	Land/Water (Potential)	During maintenance activities on a quay crane's landside rail clamp brake some hydraulic oil was found. Nil stormwater drains within the vicinity, nil oil entered the Bay.	Maintenance team isolated the hydraulic pump, put down absorbent material and cleaned up the leak. Investigation found a loose hydraulic fitting on the ram. The loose fitting was tightened. The ram was pressure tested and found to be holding pressure without further leak. **NEAR MISS:** INC0003082	Closed
38	18-Sep-18	Land (Potential)	A reach stacker leaked hydraulic oil onto the sealed ground of the rail operational area. Nil stormwater drains within the vicinity.	Maintenance team attended and put down absorbent material onto the affected area and cleaned up. The repairs were carried out and the reach stacker put back into service. Hydrawash attended and further cleaned the affected area. **NEAR MISS:** INC0003082	Closed
39	20-Sep-18	Land (Potential)	Auto Strad spreader blew a hydraulic hose and leaked oil onto the top of 2 containers and the sealed surface below. Nil stormwater drains within the vicinity.	Maintenance attended and placed absorbent material onto the affected area and cleaned up. The Auto Strad was towed away, the 2 affected containers were removed and cleaned in the Maintenance workshop. **NEAR MISS:** INC0003087	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
40	2-Oct-18	Land (Potential)	Transport carrier called Patrick to advised they collected hazardous container (Class 8, UN1824) on arrival back to their depot it was noted the container was leaking.	Using CCTV cameras Operations personnel inspected the area where the container had been stored and no leak was sighted. **NEAR MISS:** INC0003134	Closed
41	12-Oct-18	Land (Potential)	A quay crane's spreader was reported to be leaking oil onto the sealed ground on the quay line. Nil stormwater drains within the vicinity.	Maintenance team attended, isolated the spreader pump, changed over to a new spreader, the oil was cleaned up with absorbent material. **NEAR MISS:** INC0003138	Closed
42	20-Oct-18	Water/Land (Potential)	After loading a export full hazardous container (Class 2.2, UN 1044) aboard the vessel the container was found to be leaking a liquid from the underside.	Patrick removed the hazardous container from vessel and placed directly into spill trailer. Marine surveyor inspected the container (cargo – CO_2 fire extinguishers) floor and reported it was ok to remove from the terminal for repacking. The shipping line reported the consignor had loaded the cargo into the container in the rain and suspected the leak was rain water. **NEAR MISS:** INC0003217	Closed
43	23-Oct-18	Land (Potential)	A manual straddle at Berth 6 was found leaking diesel onto the sealed roadway. Nil stormwater drains within the vicinity.	Maintenance team attended, put down absorbent material onto the affected area. The source of the leak was plugged. Hydrawash attended and pressure washed and swept the area. **NEAR MISS:** INC0003225	Closed
44	24-Oct-18	Biosecurity (Potential)	Ship Team Leader found in stow aboard a vessel a pigmy bat sitting on the walkway.	Patrick contacted Biosecurity who attended site and removed the bat the next day. **NEAR MISS:** INC0003231	Closed
45	27-Oct-18	Land (Potential)	Auto Strad reported to have an oil leak. Nil stormwater drains within the vicinity.	Maintenance team attended and found the Auto Strad's spreader had a leaking hose which leaked onto the sealed roadway. Maintenance isolated the spreader to prevent further leaking during transit to Maintenance. Absorbent material was placed on the affected area and cleaned up. **NEAR MISS:** INC0003241	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
46	29-Oct-18	Land (Potential)	Auto Strad faulted in Auto Yard next to middle roadway with low hydraulic oil level. Some oil leaked on the container and the sealed roadway. Nil stormwater drains within the vicinity.	Maintenance team attended, put down absorbent material. The container as transported to Launch Pad to be washed as majority of oil was on the container. **NEAR MISS:** INC0003244	Closed
47	2-Nov-18	Air (Potential)	Leading Lasher reported an odour aboard a vessel coming from the vicinity of 28 hazardous containers (Classes 2.1, 3, 8 & 9 (liquid and gas)).	Vessel operations stopped, the shift manager met with Captain and C/O to view Hazardous Manifest to ensure area could be inspected. With the vessel's captain and C/O the shift manager inspected both ends of the affected bay and noted "ARGON" tank-tainer, venting and emitting a noticeable odour. The all clear was given and operations recommence. ESC Manager advised OPs team the tank-tainer was venting as it was designed no need to notify the EPA etc. As a DG involved Patrick reported near miss event to Port Authority NSW DGs unit. **NEAR MISS:** INC0003259	Closed
48	5-Nov-18	Biosecurity (Potential)	Shift manager reported sighting of a live bat on a vessel at berth 6.	Biosecurity contacted along with Port Authority NSW. **NEAR MISS:** INC0003267	Closed
49	6-Nov-18	Land (Potential)	Manual straddles parked behind Maintenance were inspected and found leaking oil. Nil stormwater drains within the vicinity.	Maintenance team attended and put down absorbent material around the straddles to stop/bund any further leaks. Source of the leaks repaired and affected area cleaned. Temporary bund placed around the mobile plant. **NEAR MISS:** INC0003270	Closed
50	6-Nov-18	Community (Potential)	Shift Manager reported hearing a loud banging noise coming from CargoLink when MT containers are being placed in the CargoLink park by heavy forklifts. Nil community complaints have been received.	Acting Landside manager followed up with CargoLink management and requested the heavy forklift operators place containers on container slowly to keep noise emissions to a minimum. **NEAR MISS:** INC0003291	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
51	8-Nov-18	Biosecurity (Potential)	Shipping agent reported to Patrick and Biosecurity an export container (cargo - plastic scrap) was infested with maggots.	Patrick emailed details and photos to - Port Authority NSW, EPA NSW and DPE. **NEAR MISS:** INC0003292	Closed
52	10-Nov-18	Water/Land (Potential)	Inbound vessel coming alongside Berth 6 reported to have a leaking hazardous trans-shipment container (Class 2.1, UN1950).	Patrick forwarded details (6-Nov-18) to EPA/DPE and regulatory agencies. On the vessel's arrival FRNSW Hazmat unit attended as arranged, after inspection area deemed nil safety risk, and work site returned to Patrick. Nil impact to people and the environment. **NEAR MISS:** INC0003308	Closed
53	10-Nov-18	Biosecurity (Potential)	Fly larvae was found on the walkway of a vessel.	Patrick unable to locate the source i.e. affected container. Contacted Biosecurity. **NEAR MISS:** INC0003302	Closed
54	10-Dec-18	Land (Potential)	Auto Strad engine oil filter seal failed a leaked oil onto containers and the sealed roadway in the Auto Yard. No oil leaked into any nearby stormwater drains.	Maintenance team attended – the oil filter was replaced and Auto Strad moved to workshop for inspection. Absorbent material was place over the affected area and cleaned up. The affected containers where brought back to Maintenance, washed down and then returned to the yard. The area was further cleaned using the Maintenance scrubber machine. **NEAR MISS:** INC0003462	Closed
55	11-Dec-18	Land (Potential)	Transport carrier's truck leaked engine oil onto the seal surface of a truck grid. No oil leaked into any nearby stormwater drains.	Maintenance team attended. Absorbent material was placed over the affected area and cleaned up. The area was further cleaned using the Maintenance scrubber machine. **NEAR MISS:** INC0003463	Closed
56	12-Dec-18	Land (Potential)	Auto Strad engine oil filter came loose and leaked oil onto the sealed roadway in the Auto Yard. No oil leaked into any nearby stormwater drains.	Maintenance team attended, oil filter tightened. Absorbent material put down onto the affected area. **NEAR MISS:** INC0003471	Closed

Event No.	Date / Incident No.	Area of Impact	Description / Classification	Action Taken	Status
57	17-Dec-18	Land (Potential)	Tele-Op reported truck leaked oil leak at the truck grid's waiting/reversing bay onto the sealed roadway. No oil leaked into any nearby stormwater drains.	Maintenance team attended and put down absorbent material onto the affected area and cleaned up the area. **NEAR MISS:** INC0003488	Closed
58	17-Dec-18	Land (Potential)	Truck driver reported oil spill (i.e. leak from a truck) at the truck grid in the waiting/reversing bay. No oil leaked into any nearby stormwater drains.	Maintenance team attended and put down absorbent material onto the affected area and cleaned up the area. The area was further cleaned using the Maintenance scrubber machine. **NEAR MISS:** INC0003487	Closed
59	20-Dec-18	Land (Potential)	Parked up manual straddle found leaking oil in bunded area behind Maintenance.	Maintenance team attended and put down absorbent material on the affected area and cleaned up. **NEAR MISS:** INC0003497	Closed
60	28-Dec-18	Land (Potential)	Auto Strad leaked oil onto containers and the sealed roadway in the Auto Yard. No oil leaked into any nearby stormwater drains.	Maintenance team attended and put down absorbent material on the affected area and cleaned up. The affected containers were moved to the Maintenance wash bay, pressure cleaned and returned to the Auto Yard. **NEAR MISS:** INC0003518	Closed

10. Activities to be completed in the next reporting period

Table 10: Action Plan – 2018 Annual Review (includes the annual audit and AEMR)

No.	Source	Activity	Responsibility	Timeframe
1	2017 Annual Review 3/2017, 16/2017, 23/2017, AEMR #2 (Observation)	Update Stormwater Management Plan and ensure those involved with stormwater controls are across requirements. **STATUS:** Underway.	ESC Manager, M. Gibbs	31-Mar-19
2 & 3	2017 Annual Review 11/2017, AEMR #13 (Observation) 2018 Annual Review (AEMR) DA 453, 5.7 (Observation)	Raise with DPE and NSW Ports, inconsistences in DA 494 and DA 453. **STATUS:** Modification discussed in brief with NSW Ports and DPE. Patrick prepared a draft proposed consolidation and is waiting for details of the major upgrade to rail area which may necessitate modification to approval conditions that could also address this finding in a consolidated manner.	ESC Manager, M. Gibbs	Ongoing
4	2017 Annual Review 19/2017 (Observation)	Draft Toolbox Training Talks covering key issues such as noise, littering and spills were sighted. **STATUS**: Completed (26-Feb-19)	ESC Manager, M. Gibbs	28-Feb-19
5, 6 & 7	2017 Annual Review 21/2017, AEMR #1, 2018 Annual Review DA 494, C1.3 (Observation) DA 453, 6.5 (Observation)	Review of the OEMP and all of its sub plans is scheduled for completion by 31 March 2019 which is also a requirement of DA 453. **STATUS:** Underway	ESC Manager, M. Gibbs	31-Mar-19
8	2017 Annual Review AEMR #6 (Observation)	Prepare 2018 AEMR as per the Department of Planning – Annual Review Guidelines. **STATUS:** Completed with this report (28-Feb-19)	ESC Manager, M. Gibbs	28-Feb-19
9 & 10	2017 Annual Review AEMR #17 2018 Annual Review (Audit) 2/2018 (Non-Compliance)	Locate or arrange the Energy Efficiency Compliance Report (EECR) to be repeated/undertaken **STATUS:** Locate the report or arrange it to be undertaken.	ESC Manager, M. Gibbs	31-Mar-19
11	2018 Annual Review (Audit) EPL L1.1 (Non-Compliance) 1/2018 (see #8 below)	*[Auditor] recorded this as a non-compliance against Condition L1.1 of the EPL.* **STATUS:** For noting, no further action required.	---	NA

No.	Source	Activity	Responsibility	Timeframe
12	2018 Annual Review (AEMR) EPL 6962, L1.1 & DA 453, 3.33 (Observation)	Identify key leak sources, determine controls and activate action plan. **STATUS:** E&M Manager identified controls for key leak sources, personnel allocated to progress the reduction plan and routinely report updates. ESC Manager to monitor/report trends.	ESC Manager, M. Gibbs	30-Sep-19
13	2018 Annual Review (AEMR) DA 494, C3.1 (Non-Compliance)	(1) Forward copies of Patrick's 2018 Community Feedback Quarterly Reports to the EPA; and (2) Ensure from 1/Q 2019 the Patrick Community Feedback Quarterly Report is sent to the EPA. **STATUS:** Underway	ESC Manager, M. Gibbs	5-Apr-19
14	2018 Annual Review (AEMR) DA 494, C4.2 (Observation)	Ensure the AEMR is issued 60 days after the end date of the reporting period of the report. **STATUS:** Completed with this report.	ESC Manager, M. Gibbs	28-Feb-19
15	2018 Annual Review (AEMR) DA 453, 3.52 (Non-Compliance)	Ensure a call to the EPA's Environment Incident Reporting Line of an incident/event also triggers a notification to the DPE at the same time (within 12 hrs (DA 494) and 24 hrs (DA-453)). **STATUS:** This has been adopted in all instances that notifications are sent to the EPA.	ESC Manager, M. Gibbs	Immediate ONGOING
16	2018 Annual Review (AEMR) DA 453, 3.19 (Observation)	Review condition of direction arrows on internal roadways. **STATUS:** Facilities Manager completed review and planned painting.	ESC Manager, M. Gibbs	31-Mar-19
17	2018 Annual Review (AEMR) DA 453, 3.51 (Observation)	Confirm with DPE compliance reports have been received. **STATUS:** To be done	ESC Manager, M. Gibbs	30-Apr-19
18	2018 Annual Review (AEMR) DA 453, 7.7 (Observation)	Confirm the redesigned Maintenance refuelling area complies with the EPA's Environmental Guideline: Surface Water Management on the Covered Forecourt Areas of Service Stations. **STATUS:** To be done	ESC Manager, M. Gibbs	30-Jun-19
19	2018 Annual Review (AEMR) PBE EIS, 20.8.4 (Observation)	Prepare a Feral Animal management sub-plan. **STATUS:** Underway, draft prepared.	ESC Manager, M. Gibbs	31-Mar-19
20	2018 Annual Review (AEMR) PBE EIS, 23.8.2 (Observation)	The use of alternative energy for ships berth (i.e. shore power). **STATUS:** Patrick could potentially support the use of shore power.	ESC Manager, M. Gibbs	Ongoing
21	2018 Annual Review (AEMR) PBE EIS, 33.5 (Observation)	The Operational EMP to include a Water Resources Management Plan (WRMP). **STATUS:** Underway	ESC Manager, M. Gibbs	31-Mar-19

Appendix A: Port Botany Expansion Project – Condition of Approval: DA 494-11-2003-i

Table A: CoA-494, Assessment Compliance Rating

Category	Definition
Compliant	Complies with all requirements of the condition.
Observation	Observed during the assessment which provides an opportunity or is not necessarily best practice or requires further consideration.
Non-Compliant	Does not fully comply with all requirements of the condition, categorised as 'Minor' or 'Major' depending on the severity.
Not Applicable	Either there are no compliance issues, was not applicable at the time of assessment, or is not the responsibility of Patrick.

Table 16B: CoA 494-11-2003-i – Port Botany Expansion (Applicant – Sydney Ports Corporation, transferred to NSW Ports)

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	SCHEDULE A: TERMINAL OPERATIONS		
A1	**General**		
	Scope of Development		
	The approved aspects of the development shall be carried out generally in accordance with: a) Development Application DA 494-11-2003-i, lodged with Department on 26 November 2003. b) Port Botany Expansion: Environmental Impact Statement (ten volumes), prepared by URS and dated Nov 2003; c) Port Botany Expansion Commission of Inquiry – Primary Submission (two volumes), prepared by URS dated May 2004 d) Port Botany Expansion Commission of Inquiry – Supplementary Submission to Environmental Impact Statement, prepared by URS and dated August 2004 e) Port Botany Expansion Environmental Impact Statement – Supplementary Submission (two volumes), prepared by URS and dated October 2004; f) modification application MOD-107-9-2006-i, accompanied by *Port Botany Expansion, Section 96(1A) Application: Modification of Consent Conditions*, prepared by SPC and dated September 2006; g) modification application MOD-134-11-2006-i, accompanied by *Port Botany Expansion, Section 96(1A) Modification – Wharf Structure Design*, prepared by SPC and dated November 2006;	Compliance with these requirements is verified through this independent audit process, compliance reports etc.	Compliant

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	h) modification application MOD-149-12-2006-i, accompanied by *Port Botany Expansion, Section 96(1A) Modification – Application to Modify Conditions B2.9 and B2.22 of the Port Botany Consent*, prepared by SPC and dated 1 December 2006; i) modification application MOD-78-9-2007-i, accompanied by *Port Botany Expansion – Modification of Conditions C2.20 & C2.25*, prepared by SPC, dated July 2007; j) modification application MOD-60-9-2008, accompanied by *Port Botany Expansion – Modification of Conditions B2.46 & C2.25*, prepared by SPC, dated 27 August 2008; k) modification application MOD-68-12-2008, accompanied by a letter from SPC dated December 2008; l) modification application MOD-08-03-2009, accompanied by a letter from Sydney Ports Corporation dated 16 February 2009 and assessment report titled Port Botany Expansion – Rail *Operations Section 96(1A) Modification* dated February 2009 m) modification application DA-494-11-2003-I MOD 8, accompanied by an assessment report *titled "Port Botany Expansion – Ship Turning Area Dredging Section 96 (1A) Modification* dated May 2009; n) modification application DA-494-11-2003-I MOD 9 accompanied by an assessment report titled *"Port Botany Expansion – Additional High Spot Dredging off Molineux Point Section 96 (1A) Modification"* dated May 2009. o) modification application DA-494-11-2003-I MOD 10, accompanied by an assessment within the letter titled *"Port Botany Expansion – Section 96(1A) Modification – Additional Ship Turning Area Dredging"* dated 8 July 2009; p) modification application DA-494-11-2003-i MOD 11, accompanied by an assessment report titled "*Sydney Port Botany Terminal No. 3 PKG-17.1 Planning Section 75W Modification Operations Building and Maintenance Building*" dated 14 September 2011; and q) modification application DA-494-11-2003-i MOD 12, accompanied by an assessment report titled "*Sydney Port Botany Terminal No. 3 PKG-17.1 Planning Section 75W Modification to Stormwater First Flush System*" dated 15 February 2012 and supplementary advice provided on 6 June 2012 in relation to other proprietary SQID devices; and		

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	r) modification application DA-494-11-2003-i MOD 13, accompanied by an assessment report titled "*Project No. 231658 Section 75W Modification to Stormwater Management System for Southern Expansion Area*" dated 31 October 2012; and s) modification application DA-494-11-2003-i MOD 14, accompanied by assessment reports titled "Port Botany Expansion – Section 75W Modification 14 to DA-494-11-2003i for Port and Maritime Related Interim Uses at northern tip of Hayes Dock", dated January 2013; and "Port Botany Expansion, Cumulative Construction Traffic Impact Assessment, Terminal Operations Infrastructure (March 2013 – March 2014)", dated April 2013; and t) modification application DA-494-11-2003-i MOD 15, accompanied by assessment report titled 'SICTL Quay Crane Operations', prepared by HPH and dated 20 March 2013; and u) modification application DA-494-11-2003-I MOD 16, accompanied by assessment report titled 'Port Botany Expansion Modification Application 16 to DA-494-11-2003i Permanent Uses Hayes Dock Services Area and Administrative Changes to Some Conditions', prepared by LendLease for NSW Ports and dated September 2016; and v) the conditions of this consent. Insofar as they relate to the approved development.		
	Statutory Requirements		
A1.3	All licences, permits and approvals shall be obtained and maintained as required throughout the life of the development. No condition of this consent removes the obligation to obtain, renew or comply with such licences, permits or approvals.	The Federal EPBC Approval 2002/543 and EPL 6962 remain valid. Sydney Water's Consent to Discharge Industrial Trade Wastewater No. 24990 is current. A number of other permits, licences and approvals, as issued by various government authorities, have been obtained for the operation of the terminal and are listed in Section 2.2 of the OEMP which is available on the website: http://www.patrick.com.au/environment-sustainability	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
A1.4	Port throughput capacity generated by operations in accordance with this consent shall be consistent with the limits specified in the EIS, that is, a maximum throughput capacity at the terminal of 1.6 million TEUs per annum and a total throughput at Port Botany of 3.2 million TEUs. These limits may not be exceeded by the development without further environmental assessment and approval. Sydney Ports Corporation shall prepare, or have prepared on its behalf, such further environmental assessment for the determination of the Minister.	Trade bulletins published on NSW Ports website indicate these limits are being met at present.	Compliant
	SCHEDULE C: TERMINAL OPERATIONS		
C1	**General Requirement**		
	Application of Schedule		
C1.1	The conditions in this Schedule of the consent relate to all the development and activities associated with the operation of the container terminal and associated infrastructure.	Noted – refer to detailed input below.	Compliant
C1.2	The conditions in this sub-schedule of the consent must be complied with by the Applicant, or any party undertaking the activities and works referred to under condition C1.1, with the exception of the undertaking of Port, Maritime and Waterway Related Interim Uses at Hayes Dock Services Area, which are subject to condition C1.2A – C1.2F. Should more than one terminal operator undertake operations within the terminal area.	Noted. Patrick Stevedores is a Terminal operator and on an annual basis has/will commission an independent auditor approved by the DPE to audit the premises to assess compliance against these conditions with respect to its own operations.	---
	Port and Maritime Related Interim Uses		
C1.2A	The conditions in this sub-schedule of the consent must be complied with by the Applicant, or any party undertaking activities and works associated with Port, Maritime and Waterways Related Use Interim Uses, except conditions C1.3, C1.4, C1.5, C2.5, C2.12, C2.16, C2.17, C2.18, C2.20, C2.25, C3.2, C3.3, C4.2, C4.3, C4.4 and C4.5.	Noted	---

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Operation Environment Management Plan – Port, Maritime and Waterway Related Interim Uses Hayes Dock Services Area		
C1.2B	The Applicant shall prepare an Operation Environmental Management Plan (OEMP) – Port, Maritime and Waterway Related Interim Uses prior to the commencement of Port, Maritime and Waterways Related Interim Uses on site. The Plan shall include details of how environmental performance would be managed and monitoring to meet acceptable environmental outcomes, including what actions will be taken to address potential advise environmental impacts. In particular, the following environmental issues shall be addressed in the Plan: - Odour and Air Quality; - Noise Management; - Waste Management; - Water and Wastewater Management; - Hazard and Risk Management; - Amenity, including lighting; and - Incident Reporting The OEMP shall also address: - Details of operation activities including key noise and/or vibrations generating activities and machinery that have the potential to generate noise and/or vibration impacts on surrounding sensitive receivers; - Identification of feasible and reasonable measures proposed to be implemented to minimise and manage operation noise and vibration impacts, especially during sleep disturbance; - A description of how the effectiveness of mitigation and management measures would be maintained. Noise management shall include: - Hours in which particular activities are undertaken; - Use of shore power where available; - Restrictions on notably noisy vehicles and vessels from the site; - Use of building and vehicle alarms and/or alternatives available. The plan shall also - Identify all stator obligations that the applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations; - Include a description of the roles and responsibilities of all key employees involved in the operation of the development. - Include overall environmental polices and principles to be applied to the operation of the facility. - A copy of the updated OEMP shall be submitted for approval by the Secretary within three (3) months of the date of approval of Modification 16, unless otherwise agreed by the Secretary;	Noted	Not Applicable

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Noise Management Plan – Interim Uses Hayes Dock Area Operation		
C1.2C	The noise management plan shall include, but not necessarily be limited to: - compliance standards, - community consultation, - compliant handling monitoring system, - site contact person to follow up complaints, - mitigation measures, - the design/orientation of the proposed mitigation methods demonstrating best practice, - operation times, - contingency measures where noise complaints are received, and - monitoring methods and program.	Noted	Not Applicable
	Noise Compliance Assessment - Interim Uses Hayes Dock Area Operation		
C1.2D	Noise from the Hayes Dock Service Area must not exceed the Leq (15 minute) noise limits presented in Table at C2.6 by more than 5d(B)A between 10:00pm and 7:00am. The Secretary must require a detailed noise compliance assessment, prepared by a qualified acoustic consultant. The noise compliance assessment shall meet the requirements of the Environment Protection Authority. The noise compliance assessment shall include the representative residential receiver locations identified in the Table in C2.6.	Noted	Not Applicable
C1.2E	A complaint handling procedure shall be implemented for the Hayes Dock Service Area. Annual reports shall be provided to the Department, outlining details of the complaints received. A register of complaints shall be kept and include the following: - date and time, where relevant, of the comment, inquiry or complaint, - how the comment, inquiry or complaint was communicated, - any personal details of the commenter, inquirer or complainant that were provided. If no details were provided this should be recorded, - the nature of the comment, inquiry or complaint, - any actions taken by the Applicant in relation to the comment, inquiry or complaint, including any follow-up contact, and - if no action was taken, record the reason(s) why.	Noted	Not Applicable
C12F	Reporting on the compliance of the Hayes Dock Services Area within the OEMP shall be conducted annual. Reports shall be provided to the Department within twelve (12) months of this modification unless otherwise agreed.	Noted	Not Applicable

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Operation Environmental Management Plan (OEMP)		
C1.3	The Applicant shall prepare an Operation Environmental Management Plan (OEMP) which must be approved by the Secretary prior to commencement of any operations at the terminal. The OEMP must: - identify all statutory obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations; - describe any relevant staging or phasing of the commencement of operations within the terminal envelope and any relevant timeframes; - clearly outline what aspects of environmental management, monitoring and reporting would be undertaken by the Applicant or jointly with other operators within the terminal area; - include a description of the roles and responsibilities for all key employees involved in the operation of the development; - include overall environment policies and principles to be applied to the operation of the facility; - include specific consideration of measures to address any requirements of DOP, EPA, and the Council during operation; - detail standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved, where appropriate; - detail management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent; - include the Management Plans relevant to operation, include the environmental monitoring requirements relevant to operation; and - be made available for public inspection after approval of the Director-General.	An OEMP was developed for Patrick terminal operations and was last updated in March 2015. The OEMP and its appendices were approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The current OEMP has been prepared to satisfy this condition and is available on Patrick's website: http://www.patrick.com.au/environment-management The site's OEMP is currently under revision as per 2017 Independent Audit, some progress has been made with the following sub-plans in draft e.g. Stormwater Management, Waste Management, Feral Animal Management.	**Observation**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Compliance Certification		
C1.4	Prior to each of the events listed from a) to c) below, or within such period otherwise agreed by the Secretary, documentation certifying that all conditions of this consent applicable prior to that event have been complied with shall be submitted to the satisfaction of the Secretary. Where an event is to be undertaken in stages, submission of compliance certification may be staged consistent with the staging of activities relating to that event, subject to the prior agreement of the Secretary. a) commencement of any operations within the terminal area; and b) commencement of each stage or phase of operations. *Note: (c) is not listed on the DA	The Pre-Operational Compliance Report for the Patrick Port Botany 'Knuckle' and Ramp D (dated December 2015) was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 4 February 2016 (refer to letter from Ms Karen Harragon (DPE) to Mr Trevor Brown (NSW Ports)).	**Compliant**
C1.5	Notwithstanding condition C1.4 of this consent, the Secretary may require an update report on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the requirements of the Secretary and be submitted within such period as the Secretary may agree.	The DPE requested (4 June 2018) an updated audit Action List for the 2017 AEMR. This was provided by Patrick to the DPE on 18 June 2018.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C2	**Operational Environmental Performance**		
	Air Quality Management – Odour		
C2.1	The development shall be undertaken so as not to permit any offensive odour, as defined under section 129 of the *Protection of the Environment Operations Act 1997*, to be emitted beyond the boundary of the site.	Addressed in OEMP, Section 5.2, and Line 19 and 20 of the Terminal Environmental Risk Assessment (OEMP, Appendix C). No complaints of odour(s) attributed to Patrick's Operations were received from the local community during 2018.	**Compliant**
	Air Quality Management - Dust Emissions		
C2.2	All activities shall be undertaken in a manner that minimises or prevents dust emissions from the site, including wind-blown and traffic-generated dust. All activities undertaken on the site shall be undertaken with the objective of preventing visible emissions of dust from the site. Should such visible dust emissions occur at any time, all practicable dust mitigation measures, including cessation of relevant works, as appropriate, shall be identified and implanted such that emissions of visible dust cease.	Addressed in the OEMP, Section 5.2. Between December 2015 and May 2016, a Control (Red Imported Fire Ant) Order was in place at Port Botany and prevented Patrick from undertaking removal of any evacuation materials off site. During 2018 no dust emissions were – • detected during environmental inspections of the site; and • reported by the community or external parties to Patrick by the community or external parties.	**Compliant**
C2.3	All trafficable and vehicle manoeuvring areas shall be maintained at all times in a condition that minimises the generation and emission of dust.	All internal roads and truck areas are paved/sealed. Patrick engages street sweeper(s) to sweep road ways truck loading/unloading areas of loose materials and any debris on a routine basis, and as required.	**Compliant**
C2.4	All vehicles entering or leaving the site carrying a load must be covered or otherwise enclosed at all times, except during loading and unloading, to minimise the generation and emission of dust.	Generally, all vehicles entering and leaving the site are carrying shipping containers and tanks which are sealed or trades maintenance equipment. Trucks are leaving site with loads of spoil or other material, the trailers are covered or enclosed to minimise the generation of emissions of dust. External road ways are swept as needed using street sweeper(s). The majority of vehicles entering or leaving the terminal are carrying sealed shipping containers or the truck/trailer are empty. During 2018 no complaints were received relating to uncovered loads generating and emitting dust.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Noise Management - Operation Noise Management Plan		
C2.5	Prior to the commencement of operations, the Applicant must prepare an Operation Noise Management Plan in consultation with EPA, DOP, Botany and Randwick Councils. The Plan shall include noise management, mitigation monitoring and reporting to ensure that local acoustic amenity is not adversely impacted. In addition, the Operational Noise Management Plan must: - identify general activities that will be carried out and associated noise sources; - assess operation noise impacts at the relevant receivers; - a primary objective of achieving the operational noise limits outlined in this consent; - provide details of overall management methods and procedures that will be implemented to control noise from the development; - include a pro-active and reactive strategy for dealing with complaints including achieving the operation noise limits, particularly with regard to verbal and written responses; - detail noise monitoring, reporting and response procedures consistent with the requirements of EPA; - provide for internal audits of compliance of all plant and equipment; - indicate site establishment timetabling to minimise noise impacts; - include procedures for notifying residents of operation activities likely to affect their noise amenity; - address the requirements of EPA; - a strategy to identify operational practices and noise controls that can minimise/or reduce noise levels from container impacts, audible alarms and other short duration high level noise events; - identify opportunities to reduce operational noise levels including, but not necessarily limited to, selection of equipment, engineering noise controls and shore-based power; and, - be approved by the Secretary prior to the commencement of operation.	An Operational Noise Management Plan (ONMP), dated 15 January 2015 was developed for the site, and is attached to Patrick's OEMP, Appendix D. Patrick's ONMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The current ONMP is available as part of OEMP on Patrick's website. http://www.patrick.com.au/environment-management Biannual Noise Compliance Monitoring Reports have been completed for: • May 2018 • November 2018 Are available on the website at: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

<table>
<tr><th>No.</th><th>Condition of Approval 494 - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td></td><td colspan="3">Noise Management – Noise Limits</td></tr>
<tr><td>C2.6</td><td>Noise from the premises must not exceed the sound pressure level (noise) limits presented in the Table below. Note the limits represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.
<table>
<tr><th rowspan="2">Most affected residential Location</th><th>Day</th><th>Evening</th><th colspan="3">Night</th></tr>
<tr><th>L_{Aeq}(15 min)</th><th>L_{Aeq}(15 min)</th><th>L_{Aeq}(15 min)</th><th>L_{Aeq}, 9hrs</th><th>L_{Aeq}(1 min)</th></tr>
<tr><td>Chelmsford Avenues</td><td>40</td><td>40</td><td>40</td><td>38</td><td>53</td></tr>
<tr><td>Dent Street</td><td>45</td><td>45</td><td>45</td><td>43</td><td>59</td></tr>
<tr><td>Jennings Street</td><td>36</td><td>36</td><td>36</td><td>35</td><td>55</td></tr>
<tr><td>Botany Road (north of Golf Club)</td><td>47</td><td>47</td><td>47</td><td>45</td><td>59</td></tr>
<tr><td>Australia Avenue</td><td>35</td><td>35</td><td>35</td><td>35</td><td>57</td></tr>
<tr><td>Military Road</td><td>42</td><td>42</td><td>42</td><td>40</td><td>60</td></tr>
</table>
For the purpose of this condition;
• Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,
• Evening is defined as the period from 6pm to 10pm
• Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays</td><td>Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits set by the EPA. The noise emissions received at the designated locations have been estimated via calculation.

Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) received from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise levels in the community as having singularly come from Patrick's operations.

The reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting

It is noted that the noise limits quoted in this condition are different to the current EPL (13 June 2017).</td><td>Compliant</td></tr>
<tr><td>C2.7</td><td>Noise from the premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise level limits in Condition C2.6 unless otherwise stated.</td><td>The location from receivers were chosen to comply with the conditions of the EPL and Condition of Approval. All locations were at the most affected point within the residential boundaries.

This requirement is addressed in the 6-monthly noise monitoring reports (May and November 2018) referred to above.</td><td>Compliant</td></tr>
</table>

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C2.8	Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with the LA1 (1 minute) noise level in Condition C2.6.	This requirement is included in the scope of works for the acoustic noise monitoring reports as per EPL 6962.	**Compliant**
C2.9	Where it can be demonstrated that direct measurement of noise from the premises is impractical, the DEC may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.	Noise monitoring is carried out as per C2.7 and C2.8 above, and EPL 6962.	**Compliant**
C2.10	The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.	Noise monitoring is carried out as per C2.7 and C2.8 above, and EPL 6962.	**Compliant**
C2.11	The noise emission limits identified in Condition C2.6 apply under meteorological conditions of wind speed up to 3 metres per second at 10 metres above ground level, and temperature inversion conditions up to 1.50C/100m positive lapse rate.	Noise monitoring reports referred to above confirm noise measurements were within the meteorological conditions of the Conditions of Approval.	**Compliant**
	Operational Traffic Management Plan		
C2.12	Prior to the commencement of terminal operations, the applicant must prepare an Operational Traffic Management Plan in consultation with RTA, DOP, Botany and Randwick Councils and SSROC. The Applicant shall address the requirements of these organisations in the Plan. The Applicant shall also consult with the Community Consultative Committee in preparation of the Plan. The plan must include, but not be confined to, mitigation measures identified in EIS such as: - identification of preferred routes to minimise noise impacts on the surrounding community; - physical and operational measures (including signage) to mitigate noise impacts from vehicles accessing and leaving the terminal; - measures to limit the impact of traffic noise on Foreshore Road and Botany Road; - driver education and information to promote driver habits to minimise noise; and - timetabling, scheduling and details of vehicle booking systems. The plan must be submitted and approved by the Secretary prior to the commencement of operations.	An Operational Traffic Management Plan (OTMP), dated 3 March 2015 was prepared in consultation with the relevant stakeholders and addresses the requirements of this condition. Patrick's OTMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). A copy of the current OTMP is available on the Patrick website: http://www.patrick.com.au/environment-sustainability	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Waste Management On-Site		
C2.13	Management of waste must be in accordance with the environment protection licence issued by EPA under the *Protection of the Environment Operations Act 1997*.	A Waste Management Plan (WMP) has been developed and forms Appendix G to the OEMP and was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). A copy of the current WMP is available on the Patrick website: http://www.patrick.com.au/environment-management EPL 6269 Conditions A1 and L2 details the scheduled activities for the premises and the types of waste permitted to be received.	**Compliant**
C2.13A	The management of waste for uses and activities not subject to an Environmental Protection Licence, shall be managed and disposed of in accordance with the *Protection of the Environment Operation (Waste) Regulation 2005 and* the *Waste Classification Guidelines (DECCW 2009*), or any future guideline that may supersede that document. All waste materials removed from the site shall only be directed to a waste management facility lawfully permitted to accept the materials.	A Waste Management Plan (WMP) has been developed and forms Appendix G of the OEMP and was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). A copy of the current WMP (OEMP, Appendix G) is available on the Patrick website: http://www.patrick.com.au/environment-management Patrick engages licensed waste transport providers to remove any hazardous waste generated at the site (e.g. Maintenance department). Hazardous waste is disposed of at appropriately licensed facilities. Records of waste oils and filters, transporters and waste oil receival locations are maintained in a Waste Register.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Water and Wastewater Management		
C2.14	Except as may be expressly permitted by a licence under the *Protection of the Environment Operations Act 1997* in relation to the development, section 120 of that Act (prohibition of the pollution of waters) shall be complied with in connection to the development.	In 2018 there were 60 'environmental' related events, of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident. One of these was classified as a minor water pollution incident: On 9 September 2018, at Berth 7 (covered by DA 453) a minor leak occurred. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day. With the poor visibility of the water between the wharf and the vessel it was difficult to see if any of the oil had entered the waters of the dock. As a precaution, absorbent booms were placed into the waters, when removed there was some residual oil adhering to the absorbent material. The actual quantity was difficult to determine. A detailed report was sent to the EPA, NSW Ports and DPW on the 18 and 19 September 2018. The remaining events were contained within the terminal area and cleaned up without any discharge to the environment and have been classified as 'near miss - environmental'.	**Compliant**
C2.15	Condition deleted from Development Consent	---	---
	Hazards and Risk Management – Hayes Dock Interim Uses		
C2.15A	Port, maritime and waterways related interim uses with in Hayes Dock may involve the loading, unloading and storage of minor volumes of dangerous goods (DGs) for the sole purpose of minor site maintenance; line boat, barge and tug maintenance; related service activities and boat refuelling.	Noted	**Not Applicable**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Hazards and Risk Management - Storage and Handling of Dangerous Goods		
C2.16	Prior to the commencement of operation, the Applicant shall develop management measures in consultation with the Major Hazards Unit of DOP regarding the use of the new terminal for loading, unloading and storage of dangerous goods of Classes 2.3 and 6.	The Emergency Response Plan (ERP) and Emergency Response Procedures, Appendix N of the OEMP was developed to meet the expectation of the DPE's Major Hazards Unit i.e. to ensure the actions of Patrick when dealing with an emergency involving Class 2.3 or Class 6 dangerous goods did not increase the off-site risk described in the Preliminary Hazard Analysis. DG movements are managed as per *AS3846 – The handling and transport of dangerous goods cargoes in port area.* Standard Operating Procedure (SOP) – *Storage & Handling of Hazardous Dangerous Goods (PBT_OPS_SOP_04_03_v4, 12 September 2017):* • Section 4.1 - outlines Threshold Limits of Different Classes of Hazards / Dangerous Goods at the Terminal; and • Section 4.5 – Stacking & Segregation of Hazardous / Dangerous Goods. A copy of the current ERP is available on the Patrick website: http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C2.17	Twelve months after the determination of DA-494-11-2003-I MOD 6, the Proponent shall submit an annual report to the Secretary which provides details on actual Dangerous Goods movements listed in Table 1 provided in Schedule 4. Should the threshold limits listed in Table 2 in Schedule 4 be exceeded for three consecutive annual reporting years, or if the maximum limits are reached in a single 12 months reporting, the Applicant shall prepare an updated hazard analysis for the PBR operations. The hazard analysis shall: - Be prepared in consultation with the Department; - Be prepared in accordance with Hazardous Industry Planning Pater No. 6, 'Hazard Analysis'; - Assess compliance against the land use safety planning risk criteria (including individual fatality risk, injury/irritation risk and societal risk), as outlined in Hazardous Industry Planning Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning'; and - Assess whether the risks from PBE operations will significantly impact on the cumulative risk contour of 1 x 10-6 per annum, contained in Figure 2 of the Port Botany Land Use Safety Study Overview Report 1996, or any other revised land use safety study for the Port that supersedes the 1996 study. The report shall be prepared to the satisfaction of the Secretary. The hazard analysis is to be submitted to the Secretary within 6 months of an identified threshold exceedance, or as agreed to by the Secretary. The information provided shall cover all stevedores in the PBE area. The information may be provided separately by each stevedore to the Department or in total for the PBE by the Applicant.	Clarified with issue of DA 494, MOD 16. On 26 September 2018 Patrick reported to NSW Ports that 8 containers of Dangerous Goods (Class 2.3) transited through Patrick's Berth 6 (covered by this consent DA 494) for the period 1 September 2017 to 31 August 2018.	**Compliant**

<table>
<tr><th>No.</th><th>Condition of Approval 494 - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td></td><td>
Table 1 Dangerous Goods Reporting Threshold
<table>
<tr><th rowspan="2">DG Class</th><th colspan="2">Basis – Unit Type and number of shipping containers through PBE Note 1 per year containing DG Class</th><th rowspan="2">Comments</th></tr>
<tr><th>From 2 te up to 12 te NEQ Note 2</th><th>≥ 12 te NEQ Note 2</th></tr>
<tr><td>Total Class 1.1 & 1.2</td><td>83</td><td>63</td><td>Number as per PHA (rev. 7) Table 6.8</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
<tr><td></td><td>Containers of packaged material</td><td>Tanktainers (Bulk) (<= 20 m³)</td><td></td></tr>
<tr><td>Class 2.3</td><td>157</td><td>-</td><td>Packaged material is total of Class 2.3 as per PHA Table 6.8</td></tr>
<tr><td>Toxic gases DG Class 2.3</td><td>-</td><td>26</td><td>Class 2.3 Tanktainers (bulk) – new figure developed from Technical Note Section 2.5 Note 3</td></tr>
<tr><td>Very Toxic gases, DG Class 2.3 substances including Chlorine (1017), Sulphur Dioxide (1079) and Methyl Bromide (1062) or any Class 2.3 substance meeting GHS Note 4 Acute Toxicity Category 1</td><td>-</td><td>1</td><td></td></tr>
<tr><td>Class 8 only Hydrogen Fluoride (1051)</td><td>11</td><td>23</td><td>HF numbers as per PHA (rev. 7) Table 6.8</td></tr>
</table>
Notes:
(1) PBE (Port Botany Expansion), numbers are inclusive of all stevedores operating under this consent.
(2) Contents weight can be used to assign container numbers to a Net Explosive Quantity (NEQ) range. 1 te NEQ can be assumed to equal 1 te contents weight in a container.
(3) Technical Note, PBE Proposed revision of Condition of Consent in relation to DGs prepared by Sherpa Consulting Pty Ltd, Document No. 21137-TN-001 Rev 0 22 Mar 2017.
(4) UN chemical classification, Globalised Harmonised System (GHS)
</td><td>On 16 October 2018 NSW Ports reported to the DPE the cumulative data from Patrick and Sydney International Container Terminal as per DA 494-11-2003-i MOD 16.

The letter stated the total volume of 21 containers of packaged material is well below the defined reporting threshold limit of 157 containers as defined in Table 1, Schedule 4 of MOD 16/DA 494-11-2003-i.

For details of the unit type and number of shipping containers which passed through Patrick's Berth 6 (covered by DA 494) for the period 1 September 2017 to 31 August 2018, refer to Appendix H.</td><td>Compliant</td></tr>
</table>

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C2.18	The Applicant shall not store or handle or permit to be stored or handled, dangerous goods of Class 2.3, toxic compressed or liquefied gases above the quantities stored or handled in 1995/96 except in accordance with recommendations 1.1 and 1.2 in the Port Botany Land Use Safety Study (1996).	As above.	**Compliant**
C2.19	Condition deleted from Development Consent	Not Applicable	**Not Applicable**
	Emergency Incident Management - Emergency Response and Incident Management Plan		
C2.20	The Applicant shall develop an Emergency Response and Incident Management Plan in consultation with EPA, DOP, Council and the Community Consultative Committee. The Plan must be approved by the Secretary prior to the commencement of operations and shall detail: - terminal security and public safety issues; - effective spill containment and management; - effective firefighting capabilities; - effective response to emergencies and critical incidents; and - a single set of emergency procedures, consistent with the existing Port Botany Emergency Plan, should be developed that be scaled as appropriate for any incident or emergency.	The Emergency Response Plan (ERP) and Emergency Response Procedures (November 2015) have been developed and attached to the OEMP as Appendix N and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The ERP is available on the Patrick website – http://www.patrick.com.au/environment-management	**Compliant**
	Aviation Operational Impacts - Impact on Aviation Operations at Sydney Airport		
C2.21	The Applicant shall ensure that the location of fixed terminal operating infrastructure adequately takes into account the required lateral separation distances to minimise the interference to Sydney Airport radar and navigational systems.	Patrick has obtained approval under the *Airports (Protection of Airspace) Regulations 1996* (APAR) (Ref: 12/5083) for the intrusion of three quay cranes [Nos 12, 13 & 14] into prescribed airspace for Sydney Airport. Approval was granted by Flysafe Aerodrome Precincts, Aviation and Airports Division of the Department of Infrastructure and Transport on 12 December 2012.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Aviation Operational Impacts - Obstacle Limitation Surface		
C2.22	The Applicant shall ensure that all operation equipment is below the obstacle limitation surface, unless otherwise permitted by an approval under the *Airports Act 1999 and Airports (Protection of Airspace) Regulation 1966.*	As above.	**Compliant**
	Aviation Operational Impacts - Terminal Lighting		
C2.23	The Applicant shall ensure design specifications of the terminal lighting conform to the requirements of Regulation 94 of the Civil Aviation regulations 1988.	Patrick has obtained approval under the *Airports (Protection of Airspace) Regulations 1996* (APAR) (Ref: 12/5083) for the intrusion of three quay cranes [Nos. 12, 13 & 14] into prescribed airspace for Sydney Airport. Approval was granted by Flysafe Aerodrome Precincts, Aviation and Airports Division of Department of Infrastructure& Transport on 12 December 2012.	**Compliant**
	Aviation Operational Impacts - Light Spill		
C2.24	The Applicant shall adopt measures to ensure that there is minimal light spill from ships which may cause distraction, confusion or glare to pilots. These may include: - minimising ship board lighting while berthed; - orientating ships in a specific direction; and or - providing temporary shielding on the ship mounted floodlights while docked.	Maritime Order 32 Schedule 1 (2) lighting requires adequate lighting during loading or unloading activities. When vessels are loaded/unloaded at night and sufficient lighting will be required to undertake loading or discharge operations. Note: The Pre-Operational Compliance Report for the Patrick Port Botany 'Knuckle and Ramp D' (dated December 2015) lists the status of this condition as "open" with comments about consultation with relevant parties.	**Compliant**
	Aviation Operational Impacts - Bird Hazard Management Plan		
C2.25	Prior to operations, the Applicant shall develop a Bird Hazard Management Plan to minimise the attraction of bird species that pose a risk to aircraft movements. The Plan is to be prepared in consultation with the Department of Transport and Regional Services, Sydney Airport Corporation and Botany and Randwick Councils. The Plan must be approved by the Secretary prior to the commencement of operations.	A Bird Hazard Management Plan (undated) has been developed for the site and forms Appendix Q to the OEMP. Patrick's Bird Hazard Management Plan as part of the OEMP was conditionally approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The Bird Hazard Management Plan is available on the Patrick website as part of OEMP on website: http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C3	**Community Information, Involvement and Consultation**		
	Community Information Complaints Handling		

C3.1	The Applicant must meet the following requirements in relation to community consultation and complaints management:
	- all monitoring, management and reporting documents required under the development consent shall be made publicly available;
	- provide means by which public comments, inquiries and complaints can be received, and ensure that those means are adequately publicised; and
	- includes details of a register to be kept of all comments, inquiries and complaint received by the above means, including the following register fields:
	  - the date and time, where relevant, of the comment, inquiry or complaint;
	  - the means by which the comment, inquiry or complaint was made (telephone, fax, mail, email or in person);
	  - any personal details of the commenter, inquirer or complainant that were provide, or if no details ere provided, a note to that effect;
	  - the nature of the complaint;
	  - any actions(s) taken by the Applicant in relation to the comment, inquiry or complaint, including any follow-up contact with the commenter, inquirer or complainant;
	  - if no action was taken by the Applicant in relation to the comment, inquiry or complaint, the reason(s) why no action was taken;
	  - Provide quarterly reports to the Department and EPA, unless otherwise agreed by the Secretary, outline details of complaints received.
		The management process for public comments, inquiries and complaints are documented in the OEMP (Appendix P) and reporting is addressed in Section 4.2.11 of the OEMP and is addressed in Section 5.4. Table 4.
		A Statement of Compliance, and a Monitoring and Complaints Summary is provided to NSW EPA as part of the Annual Return (OEMP, Section 4.2.3).
		Contact details and 24/7 enquires and concerns line (Ph. (02) 9394 0308) is available to the public on Patrick's website:
		http://www.patrick.com.au/environment-sustainability
		During the reporting period (2018) – three (3) public comments, inquires and complaints were received by Patrick (refer to Section 7 – Public Comments, Inquiries and Complaints Register of this AEMR).
		Following the end of each quarter Patrick prepared and issued a copy of the Community Feedback Quarterly Report to the DPE and NSW Ports
		A copy of the report is available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting
		Finding: Patrick has issued the Community Feedback Quarterly Report to the DPE and NSW Ports, not sent to the EPA.
			Non-Compliant

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C3.2	At least 6 months prior to commencement of operations, the Applicant shall establish a Community Consultative Committee to oversee the environmental performance of the development. This committee shall: (a) be comprised of: - 2 representatives from the Applicant, including the person responsible for environmental management; - 1 representative from Botany Bay City Council; and - at least 3 representatives from the local community, whose appointment has been approved by the Secretary in consultation with the Council; (b) be chaired by an independent party approved by the Secretary; (c) meet at least four times a year, or as otherwise agreed by the CCC; (d) review and provide advice on the environmental performance of the development, including any construction or environmental management plans, monitoring results, audit reports, or complaints; and Note: The Applicant may, with the approval of the Secretary, combine the function of this CCC with the function of other existing Community Consultative mechanisms the area, including the construction phase CCC (Condition B3.2) however, if it does this it must ensure that the above obligations are fully met in the combined process. (e) port rail noise within the Port Botany Expansion site is to be an ongoing agenda item to be discussed by the CCC and relevant stakeholders; and (f) within 12 months of the commencement of MOD 16, an advertisement must be placed for new members to join the CCC, given that the other working groups such as the RNWG are no longer present.	NSW Ports have confirmed they are responsible for the implementation of this condition. A Patrick representative attends the 3-monthly Port Botany Precinct Community Consultative Committee (PBCCC). The following staff attended the four committee meetings during the reporting period. • Marie Gibbs (Environmental Representative) Meetings were held on: • 6 February 2018 • 1 May 2018 • 7 August 2018 • 13 November 2018 The chairperson is Roberta Ryan and held at Hutchison Port's (SICTL) terminal. As and when required / requested Patrick provides updates during the meeting. Port rail noise is included in the agenda as a routine agenda item. Minutes are available on the NSW Ports website: https://www.nswports.com.au/community-and-environment-hub/consultative-committees/port-botany/	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C3.3	The Applicant shall, at its own expense: a. ensure that 2 of its representatives attend the Committee's meetings; b. provide the Committee with regular information on the environmental performance and management of the development; c. provide meeting facilities for the Committee; d. arrange site inspections for the Committee, if necessary; e. take minutes of the Committee's meetings; f. make these minutes available on the Applicant's website within 14 days of the Committee meeting, or as agreed to by the Committee; g. respond to any advice or recommendations the Committee may have in relation to the environmental management or performance of the development; and h. forward a copy of the minutes of each Committee meeting, and any responses to the Committee's recommendations to the Secretary within a month of the Committee meeting.	NSW Ports have confirmed they are responsible for the compliance with this condition and it is satisfied by the Port Botany Community Consultative Committee (PBCCC). Representatives are from all of the operators in the PBE project covered by the Development Consent, and other terminal operators. During 2018 a Patrick representative attended all four PBCCC meeting held at Hutchison Port's (SICTL). Meetings are chaired by Roberta Ryan, and the minutes are taken by Sandra Spate (both are members of the community). The meeting minutes are published on the NSW Ports website: https://www.nswports.com.au/community-and-environment-hub/consulative-committees/port-botany/	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
C4	**Environmental Monitoring and Auditing**		
	Incident Reporting		
C4.1	The Secretary shall be notified of any incident with actual or potential significant off-site impacts on people or the biophysical environment within 12 hours of the Applicant, or other relevant party undertaking the development, becoming aware of the incident. Full written details of the incident shall be provided to the Secretary within seven days of the date on which the incident occurred. The Secretary may require additional measures to be implemented to address the cause or impact of any incident, as it relates to this consent, reported in accordance with this condition, within such period as the Secretary may require.	OEMP Table 4 also sets out reporting requirements. The Emergency Response Plan (ERP) is available as part of OEMP on the Patrick website: http://www.patrick.com.au/environment-management The terminal's escalation matrix (revised 17 May 2018) has been updated to include the notification and reporting process the frontline managers, such as the duty shift managers are to follow i.e. notify regulators of actual or potential environmental incidents / near misses with the potential to impact people and/or the environment. The terminal's environmental performance is internally communicated by the ESC Manager on a daily, weekly and monthly basis. Patrick records environmental incidents (actual and potential) into the terminal's Environment, and Public Comments, Inquires & Complaints Register. The register also records when incident details are communicated to EPA, NSW Ports and DPE.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Annual Environmental Management Report (AEMR)		
C4.2	The Applicant must prepare an Annual Environmental Management Report for the development. The Annual Environmental Management Report must: - detail compliance with the conditions of this consent; - contain a copy of the Complaints Register (for the preceding twelve-month period, exclusive of personal details) and details of how these complaints were addressed and resolved; - include a comparison of the environmental impacts and performance predicted in the EIS and additional information documents provided to the Department and Commission of Inquiry; - detail results of all environmental monitoring required under the development consent and other approvals, including interpretations and discussion by a suitably qualified person; - contain a list of occasions in the preceding twelve-month period when environmental performance goals have not been achieved, indicating the reason for the failure to meet the goals and the actions taken to prevent recurrence of that type of incident; - be prepared within twelve months of commencement of operation, and every twelve months thereafter; - to the satisfaction of the Secretary for approval; and - be made available for public inspection.	The requirement for an annual environmental management report (AEMR) is detailed in the OEMP, section 4.2 – Table 4. While for compliance purposes the date the Patrick site was deemed Operational was the 4 February 2016, for ease this AEMR covers the 12-month period from the 1 January to 31 December. The AEMR is required to be submitted no later than 60 calendar days after the end of each reporting period (i.e. end February) as per the *NSW Government – **"Annual Review Guidelines",** Post-approval requirements for State significant mining developments, October 2015.* Following submission of this 2018 AEMR to NSW Ports and DPE it will be uploaded onto Patrick's website - http://www.patrick.com.au/environment-monitoring-reporting **Finding:** The 2017 AEMR was issued on 20 August 2018, approx. 6 months after the twelve months i.e. due date of 28 February.	**Non-Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Environmental Representative		
C4.3	Prior to the commencement of operations, a suitably qualified and experienced Environmental Representative(s) shall be nominated to and approved by the Secretary. The Environmental Representative(s) shall be employed for the duration of operations, or as otherwise agreed by the Secretary. The Environmental Representative shall be: - the primary contact point in relation to the environmental performance of the terminal operations; - responsible for all Management Plans and Monitoring Programs required under this consent, in relation to the terminal operations; - responsible for considering and advising on matters specified in the conditions of this consent, and all other licences and approvals relating to the environmental performance and impacts of the terminal operations; - responsible for the management of procedures and practices for receiving and responding to complaints and inquiries in relation to the environmental performance of the terminal operations; - required to facilitate an induction and training program for relevant persons involved with the terminal operations; and - - given the authority and independence to require reasonable steps be taken to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant actions be ceased immediately should an adverse impact on the environment be likely to occur.	Patrick's Environmental, Sustainability & Compliance Manager, Marie Gibbs, was approved as Patrick's Environmental Representative on 3 October 2017.	**Compliant**

No.	Condition of Approval 494 - Detail	Evidence	Assessment Rating
	Environmental Training		
C4.4	Prior to the commencement of operations an Environmental Training Program shall be developed and implemented to establish a framework in which relevant employees will be trained in environmental management and the operation of plant and equipment, including pollution control equipment, where relevant. The Program shall include, but not necessarily be limited to: a) identification of relevant employment positions associated with the development that have an operational or management role related to environmental performance; b) details of appropriate training requirements for relevant employees; c) a program for training relevant employees in operational and/ or management issues associated with environmental performance; and d) a program to confirm and update environmental training and knowledge during employment of relevant persons.	Section 4.4 of the OEMP specifies Environmental Training requirements. Following the 2017 Audit the site induction was significantly revised (including additional environmental details) and rolled out across the terminal starting June 2018. Draft toolbox talks have been prepared for review prior to rolling out in early 2019.	**Compliant**
	Environmental Auditing		
C4.5	Within one year of the commencement of operations and every year thereafter, the Applicant shall fund a full independent environmental audit. The audit must be undertaken by a suitably qualified person/team approved by the Secretary. The audits would be made publicly available and would: - be carried out in accordance with ISO 14010 – Guidelines and General Principles for Environmental Auditing and ISO 14011 – Procedures for Environmental Auditing; - assess compliance with the requirements of this consent, and other licences and approvals that apply to the development; - assess the construction against the predictions made and conclusions drawn in the development application, EIS, additional information and Commission of Inquiry material; and - review the effectiveness of the environmental management of the development, including any environmental impact mitigation works. - Note: An independent and transparent environmental audit can verify compliance (or otherwise) with the Minister's consent and various approvals. Auditing also provides an opportunity for continued improvement in environmental performance.	On 3 October 2017 the DPE approved Wolf Peak Australia Pty Ltd auditors (Steve Fermio and Derek Low) to conduct the independent environmental audits. The 2018 annual independent environmental audit was conducted by WolfPeak on 17 January 2019. A copy of the final audit report was sent to NSW Ports and DPE on 14 February 2019 and is available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliance**

Appendix B: Patrick Redevelopment - Condition of Approval: DA 453-12-2002-i

Table B: CoA-453, Assessment Compliance Rating

Category	Definition
Compliant	Complies with all requirements of the condition.
Observation	Observed during the assessment which provides an opportunity or is not necessarily best practice or requires further consideration.
Non-Compliant	Does not fully comply with all requirements of the condition, categorised as 'Minor' or 'Major' depending on the severity.
Not Applicable	Either there are no compliance issues, was not applicable at the time of assessment, or is not the responsibility of Patrick.

Table 17B: CoA-453, Schedule 3 - Compliance

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Obligation to Minimise Harm to the Environment*)*		
1.1	The Applicant shall implement all practicable measures to prevent or minimise any harm to the environment that may result from the construction and operation of the development.	An OEMP was developed for Patrick's operations and was last updated in March 2015. The OEMP and its appendices were approved by the Secretary (prior to 24 Oct-17 was known as Director-General) 25 March 2015 to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). A copy of the current OEMP is available on the Patrick website: http://www.patrick.com.au/environment-management	Compliant

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Scope of Development		
1.2	[1] The Applicant shall carry out the development generally in accordance with: a. Development application DA-453-12-2002-i by, lodged with the Department on 16 December 2002, accompanied *Patrick Port Botany Container Terminal Upgrade, Environmental Impact Statement* (three volumes), dated November 2002 and prepared by Parsons Brinckerhoff; b. Additional information provided in respect of development application DA-453-12-2002-i, including: i. The letter from Parsons Brinkerhoff to Planning NSW dated 17 April 2003 titled *Patrick Port Botany EIS – Response to Hazard and Risk Issues;* ii. Upgrade of *Port Botany Container Terminal, Revised Noise Assessment,* dated May 2003 and prepared by Wilkinson Murray Pty Ltd; iii. *Supplementary Avifauna Survey & Assessment of Impacts*, dated 26 May 2003 and prepared by AMBS Consulting; iv. The memorandum from Parsons Brinckerhoff dated 30 May 2003 and titled *Patrick Water Quality Assessment;* v. The amended development application submitted to the Department on 30 May 2003 and associated drawings; vi. The letter from Patrick Terminals to Planning NSW dated 11 June 2003 *titled Patrick Port Botany EIS;* vii. The memorandum from Fielders Engineers Pty Ltd to Parsons Brinkerhoff dated 20 June 2003 titled *Transport NSW's Comments;* viii. The letter from Qest Consulting Group to Parsons Brinkerhoff dated 3 July 2003 titled *Preliminary Hazard Analysis for Patrick Stevedores;* c. Modification application MOD-56-6-2004-i, lodged with the Department on 28 May 2004 and accompanied by the supplementary document tilted *Application to Modify Development Consent*, dated 19 May 2004; d. Modification application MOD-83-8-2004-i, lodged with the Department on 16 August 2004, accompanied by four plans titled *Proposed Staff Amenities* (Job No. 0400107, Revision C) numbered 01 to 04 respectively;	Compliance with these requirements is verified through the independent audit process, compliance reports etc.	**Compliant**

[1] Incorporates EPA General Terms of Approval – A1.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Scope of Development *(continued)*		
1.2	e. Modification application MOD-83-8-2004-i, lodged with the Department on 16 August 2004, accompanied by four plans titled *Proposed Staff Amenities* (Job No. 0400107, Revision C) numbered 01 to 04 respectively; f. Modification application MOD-156-10-2005-i, lodged with the Department on 6 October 2005, accompanied correspondence dated 6 October 2005 and titled *S96(1A) Application: Patrick Corporation – Port Botany Terminal* and plan titled *Proposed Administration Building* (Job No. PDS-06-38, Revision A). g. Modification application MOD-38-3-2006-i, lodged with the Department on 2 March 2006, accompanied correspondence dated 1 March 2006 and titled *S96(1A) Application: Patrick Corporation – Port Botany Terminal*, and plans titled *Proposed Administration Building* (Job No. PDS-06-38, Revision D); h. Modification application MOD-38-4-2007-i, lodged with the Department on 11 April 2007, accompanied correspondence dated 10 April 2007 and titled S.96(1A) Application, Patrick Corporation – Port Botany Terminal, and plans titled Proposed Additional Staff Amenities (Job No. PDS-07-81, Issue E); i. Modification application MOD-76-9-2007-i, lodged with the Department on 24 August 2007, accompanied correspondence dated 19 June 2007 and 5 November 2007 titled *S.96(1A) Application, Patrick Corporation – Port Botany Terminal*, and the following plans: i. Proposed *Camco Trafficgate* (Job No. PDS-07-84, Issue: B, Drg. No.: 01); ii. Proposed *Camco Trafficgate* (Job No. PDS-07-84, Issue: B, Drg. No.: 02); iii. Proposed *Camco Trafficgate* (Job No. PDS-07-84, Issue: B, Drg. No.: 01); iv. *Truck Portal Gate Frame Arrangement and Details* (Project No. SY070313, Dwg No. S5.00, Issue A); v. *Train Portal gate Frame Arrangement and Details* (Project No. SY070313m Dwg No. S4.00, Issue E) vi. *Train Portal Gate Frame Footing Plan and Details* (Project No. SY070313, Dwg No. S4.00, Issue D) vii. *Structural Notes* (Project No. SY070313, Dwg No. S1.00, Issue D) j. Modification application DA-453-12-2002-i, MOD 7, accompanied by an assessment report titled *Section 75W Modification Port Botany Container Terminal Environmental Assessment* prepared by GHD and dated June 2013; and k. The conditions of this consent. In the event of an inconsistency between a condition of this consent and the documents listed under (a) to (i) above, the conditions of consent shall prevail to the extent of the inconsistency.		

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Staged Development		
1.3	Under Section 80(4) of the Act, this consent applies to the development, as described in Schedule 1, only.	Noted	---
1.4	Deleted	---	---
	Temporary Structures		
1.4A	This consent permits the erection and use of temporary staff accommodation as described in the documents listed under condition 1.2(c) of this consent.	Noted	---
1.4B	All temporary staff accommodation erected and utilised on the site shall be completely removed from the site once the permanent accommodation is completed.	All temporary staff accommodation was been removed in 2015.	**Compliant**
	Exceptions		
1.5	The Applicant shall delete the proposed revegetation and/or rehabilitation landscaping works in the eastern portion of the boat ramp carpark, marked in red, on the Proposed Landscape Layout (Figure A9 Rev C).	Noted	---
	Provision of Documents		
1.6	Where applicable, the Applicant shall provide all documents and reports required to be submitted to the Secretary under this consent in an appropriate electronic format. Provision of documents and reports to other parties, as required under this consent, shall be in a format acceptable to those parties and shall aim to minimise resource consumption. Note: At the date of this consent, an appropriate electronic format for submission to the Director-General is the "portable document format" (pdf) or another format that may be readily converted to pdf.	Noted	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Statutory Requirements		
1.7	The Applicant shall ensure that all licences, permits and approvals are obtained and kept up-to-date 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 approvals.	The Federal EPBC Approval 2002/543 and EPL 6962 remain valid. Consent to Discharge Industrial Trade Wastewater Consent No. 24990 is current. A number of other permits, licences and approvals, as issued by various government authorities, have been obtained for the operation of the terminal and are listed in Section 2.2 of the OEMP which is available on the Patrick website: http://www.patrick.com.au/environment-management	**Compliant**
	Integrated Approvals		
1.8	No works are to commence at the site prior to a Part 3A Permit under the *Rivers and Foreshores Improvement Act 1948* being obtained from the Waterways Authority and a Licence under the *Protection of the Environment Operations Act 1997* being obtained from the EPA. A copy of these approvals shall be submitted to the Secretary prior to the issue of the construction certificate by the Principal Certifying Authority.	It is noted that the *Rivers and Foreshores Improvements Act 1948* was repealed in 2008. This legislation relates to the construction phase so is no longer relevant to Patrick operations.	**Not Applicable**
	Compliance		
1.9	The Applicant shall ensure that all employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent.	Employees, contractors and sub-contractors are required to undertake an induction prior to commencing work on site. Following the 2017 Audit the site induction was significantly revised (including additional environmental details) and rolled out across the terminal starting June 2018.	**Compliant**
1.10	The Applicant shall be responsible for the environmental impacts resulting from the actions of all persons on the site, including any visitors.	Noted	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Compliance *(Continued)*		
1.11	Prior to the commencement of construction of the development, the Applicant shall certify in writing, to the satisfaction of the Director-General, that it has obtained all the necessary statutory approvals for the construction works and complied with all relevant conditions of this consent and/or any other statutory requirements of this development pertaining to that aspect of the development to be constructed.	Applicable to construction works etc.	Not Applicable
1.12	Prior to the commencement of operation of the development, the Applicant shall certify in writing, to the satisfaction of the Director-General that it has obtained all the necessary statutory approvals for operations and complied with all relevant conditions of this consent and/or any other statutory requirements for this development.	The Pre-Operational Compliance Report for the Patrick Port Botany 'Knuckle' and Ramp D (dated December 2015) was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 4 February 2016 (refer to letter from Ms Karen Harragon (DPE) to Mr Trevor Brown (NSW Ports)).	Compliant
1.13	Notwithstanding conditions 1.11 and 1.12 of this consent, the Director-General may require an update on compliance with all, or any part, of the conditions of this consent. Any such update shall meet the reasonable requirements of the Director-General and be submitted within such period as the Director-General may agree.	The DPE requested (4 June 2018) an updated audit Action List for the 2017 AEMR. This was provided to the DPE on 18 June 2018.	Compliant
1.14	The Applicant shall meet the requirements of the Director-General in respect of the implementation of any measure necessary to ensure compliance with the conditions of this consent, and general consistency with the EIS and those documents listed under condition 1.2 of this consent. The Director-General may direct that such a measure be implemented in response to the information contained within any report, plan, correspondence or other document submitted in accordance with the conditions of this consent, within such time as the Director-General may agree.	See 1.13 above	Compliant

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
1	**General**		
	Dispute Resolution		
1.15	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 shall be referred by either party to the Director-General, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding on all parties. For the purpose of this condition, "public authority" has the same meaning as provided under Section 4 of the Act. Note: Section 121 of the *Environmental Planning and Assessment Act 1979* provides mechanisms for resolution of disputes between the Department, the Director-General, councils and public authorities.	During 2018 there were no known disputes in relation to this condition.	Not Applicable
2	**Construction Certification**		
2.1	In relation to the construction an occupation of the development, the Applicant shall provide to the Director-General and Council the following: (a) Written notification of the appointment of a Principal Certifying Authority prior to the commencement of construction; (b) Copies of all Construction Certificates issued for the development prior to the commencement of construction; (c) Written notification of the intention to commence construction work, to be received at least two working days prior to the commencement construction. In the event that more than one Construction Certificate is issued, notification shall be provided prior to the commencement of construction the subject of each Certificate; (d) Copies of all Occupation Certificates issued for the development prior to occupation; and (e) Written notification of the intention to occupy the development, to be received at least two working days prior to occupation. In the event that more than Occupation Certificate is issued, notification shall be provided prior to the occupation the subject of each Certificate.	Applicable to construction period of the development etc.	Not Applicable
2.2	The Application shall provide all information necessary for the Principal Certifying Authority to determine that the development will comply with: (a) The Building Code of Australia; and (b) All relevant provisions of the Act, including the payment of a long service levy under Section 34 of the *Building and Construction Industry Long Service Payments Act 1986.*	Applicable to construction period of the development etc.	Not Applicable

<table>
<tr><th>No.</th><th>Condition of Approval 453 - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>3</td><td colspan="3">Environmental Performance</td></tr>
<tr><td></td><td colspan="3">Demolition</td></tr>
<tr><td>3.1</td><td>All demolition work shall be carried out in accordance with AS2601-2001 The Demolition of Structures.</td><td>Applicable to construction period of the development etc.</td><td>Not Applicable</td></tr>
<tr><td></td><td colspan="3">Hours of Operation - Construction</td></tr>
<tr><td>3.2</td><td>[2] Construction activities associated with the development, including the delivery of material to and from the site, shall only be carried out between the following hours:
(a) Between 7:00am and 6:00pm Monday to Friday inclusive;
(b) Between 8:00am to 2:00pm Saturdays; and
(c) At no time on a Sunday or a public holiday.</td><td>Applicable to construction period of the development etc.</td><td>Not Applicable</td></tr>
<tr><td></td><td colspan="3">Hours of Operation - Construction</td></tr>
<tr><td>3.2A</td><td>Notwithstanding condition 3.2 of this consent, the Applicant may undertake construction of road pavement works required under this consent between 7:00am and 10:00pm Mondays to Fridays’ and between 8:00am and 2:00pm on Saturdays. No pavement works shall be conducted on Sundays or public holidays. All pavement works shall be undertaken to strictly comply with the noise limits specified under condition 3.3 of this consent.</td><td>Applicable to construction period of the development etc.</td><td>Not Applicable</td></tr>
<tr><td></td><td colspan="3">Noise Limits</td></tr>
<tr><td>3.3</td><td>[3] Noise generated by the development shall not exceed the noise limits presented in the table below, unless otherwise agreed by the Director-General:
<table>
<tr><th rowspan="2">Location</th><th colspan="2">Day</th><th colspan="2">Evening</th><th colspan="2">Night</th></tr>
<tr><th>L_{Aeq} (15 min)</th><th>L_{A1} (1 min)</th><th>L_{Aeq} (15 min)</th><th>L_{A1} (1 min)</th><th>L_{Aeq}(15 min)</th><th>L_{A1} (1 min)</th></tr>
<tr><td>Most affected residential premises</td><td>55</td><td>55</td><td>43</td><td>55</td><td>43</td><td>55</td></tr>
</table></td><td>Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits set by the EPA. Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise levels in the community as having singularly come from Patrick’s operations.

The reports are available on the Patrick website:
http://www.patrick.com.au/environment-monitoring-reporting

Note: The noise limits within the EPL (13 June 2017) are different to those quoted here and in DA 494.</td><td>Compliant</td></tr>
</table>

[2] Incorporates EPA General Terms of Approval – L6.6; [3] EPA General Terms of Approval – L6.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Noise Assessment Report		
3.4	[4] For the purpose of condition 3.3 of this consent: (a) Day is defined as the period from 7.00am to 6.00pm Monday to Saturday and 8.00am to 6.00pm Sundays and Public Holidays; (b) Evening is defined as the period from 6.00pm to 10.00pm; and (c) Night is defined as the period from 10.00pm to 7.00am Monday to Saturday and 10.00pm to 8.00am Sundays and Public Holidays.	Noted	**Compliant**
3.5	[5] Within six (6) months of the date of this consent, the Applicant shall submit a Noise Assessment Report to the Director-General and the EPA for approval. The report shall be prepared by a suitably qualified and experienced specialist in the field of acoustics. The report shall contain the following information: (a) A critical review of all measures capable of achieving a reduction in noise emitted by operation of the facility during and upon completion of the development phase including the timetable for implementation of each measure. The report shall contain sufficient information to justify the claim that all reasonable and feasible noise control measures have been incorporated into the redevelopment of the facility so that the noise limits specified in condition 3.3 of this consent, have been achieved as early as possible prior to that date; (b) A timetable specifying dates by which all reasonable and feasible measures will be implemented as identified in (a) above; and (c) Identification and timetabling of noise control measures to reduce noise from existing plant and equipment.	An Operational Noise Management Plan (ONMP), dated 15 January 2015 was developed for the site, and is attached to Patrick's OEMP, Appendix D available on the Patrick website: http://www.patrick.com.au/environment-management Patrick's ONMP as part of the OEMP was approved by the Secretary (prior to October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)).	**Compliant**
3.6	[6] Noise from the site shall be measured at the most affected point on or within the residential boundary, to determine compliance with the noise limits in condition 3.3 of this consent. Where it can be demonstrated that direct measurement of noise from the site is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the *NSW Industrial Noise Policy.* The modification factors provided in Section 4 of the *NSW Industrial Noise Policy* shall be applied to the measured noise levels where applicable.	Biannual noise monitoring reports referred to in condition 3.3 satisfy this requirement: • May 2018 • November 2018 Are available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

[4] EPA General Terms of Approval – L6.2; [5] EPA General Term of Approval – E3.1; [6] EPA General Term of Approval – L6.3

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.7	[7] Noise from the site shall be measured at 1 metre from the bedroom window to determine compliance with the LA1 (1 minute) and LA MAX noise limits in condition 3.3 of this consent.	This requirement is included in the scope of works for the acoustic noise monitoring reports as per EPL 6962.	Compliant
3.8	[8] The noise emission limits identified in condition 3.3 of this consent apply under meteorological conditions of: (a) wind speeds of up to 3 m/s at 10 metres above ground level; and (b) temperature inversion conditions of up to 3°C/100 metres.	This requirement is included in the scope of works for the acoustic noise monitoring reports as per EPL 6962.	Compliant
	Traffic and Transport Impacts		
	Road Improvements		
3.9	The Applicant shall fund and construct the following road works to the satisfaction of the Council and the Roads and Maritime Service: (a) Upgrade of the Botany Road / Foreshore Road / Penrhyn Road intersections to provide: i. Dual eastbound right turn lanes or a lengthened single right turn lane from Foreshore Road to Penrhyn Road; and (b) A westbound continuous slip left turn lane from Penrhyn Road to Foreshore Road. (c) Construction of a roundabout intersection at Penrhyn Road / Boat Ramp Access Road / Inter terminal Access Road. The roundabout shall be designed to accommodate a u-turn manoeuvre by a single B-double vehicle. (d) Construction of a new access road to the Penrhyn Boat Ramp.	Applicable to construction period of the development etc.	Not Applicable
3.10	The Applicant shall complete the upgrade of the Foreshore Road / Penrhyn Road / Botany Road intersection within two (2) years of the date of this consent, unless otherwise agreed by the Director-General. Commencement of road construction works required under this consent shall not commence until the Applicant has consulted with the owner / occupier of the Caltex (within access from Penrhyn Road) and demonstrated to the satisfaction of the Director-General that the median strip closure on Penrhyn Road will not cause an access conflict at that development.	Applicable to construction period of the development etc.	Not Applicable

[7] EPA General Term of Approval – L6.4; [8] EPA General Term of Approval – L6.5

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.11	The roadworkers in condition 3.9 of this consent shall be designed and constructed in accordance with RMS requirements and standards. Detailed design plans of the proposed road works shall be submitted to the RMS for approval prior to construction. Note: A plan checking fee and lodgement of a performance bond may be required from the Applicant prior to the release of the approved road design plans by the RMS.	Applicable to construction period of the development etc.	Not Applicable
3.12	The shoulders of the new boat ramp access road shall be constructed with concrete edge strips.	Applicable to construction period of the development etc.	Not Applicable
3.13	The new boat ramp access road shall be completed prior to the closure of the existing Penrhyn Road access to the boat ramp.	Applicable to construction period of the development etc.	Not Applicable
	Transport Code of Conduct		
3.14	Prior to the commencement of operations, the Applicant shall submit for the Director-General's approval a Transport Code of Conduct for the development. The Code shall outline the management of traffic impacts associated with the development and minimum requirements for the movement of heavy vehicles to and from the site. The Code shall address the requirements of Council and shall include, but not necessarily be limited to: (a) restrictions to routes, where relevant; (b) restrictions to the hours of transport operations to avoid travelling through built-up areas late at night or at times of high traffic flows in those areas; and (c) minimum requirements for vehicle maintenance to address noise and exhaust emissions.	An Operational Traffic Management Plan (OTMP), dated 3 March 2015 was developed for the site as Appendix E to the OEMP. Patrick's OTMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The current OTMP is available on Patrick's website: http://www.patrick.com.au/environment-management	**Compliant**
	Parking		
3.15	The Applicant shall ensure that any parking spaces within the boat ramp parking area, that are required for the construction of the new access road shall be replaced with an equivalent number and size of parking spaces.	Applicable to construction period of the development etc.	Not Applicable
3.15A	All parking associated with construction shall be temporary, provided within construction compounds and located wholly within the site.	Applicable to construction period of the development etc.	Not Applicable

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.15B	The site shall provide a maximum of 333 car parking spaces within two new carparks, of the total number of spaces, at least two shall be for visitors parking and one mobility impaired space provided, located adjacent to building entries and clearly delineated. All car parking, landscaping and bicycle parking shall be provided and designed in accordance with the *Port Botany Development Code 2012.*	Applicable to construction period of the development etc.	Not Applicable
3.16	The staff and visitor's carpark shall be designed to comply with *AS2890.1 1993 Parking Facilities – Off-Street Car Parking.*	Applicable to construction period of the development etc.	Not Applicable
3.17	Disable, visitor and service vehicle parking spaces shall be clearly signposted and designated in accordance with relevant Australian Standards.	Disable, visitor and service vehicle parking spaces shall be clearly signposted and designated.	Compliant
	Access and Internal Road Works		
3.18	All driveways shall be clearly signposted and designed to accommodate the largest vehicle likely to use the site.	Applicable to construction period of the development etc.	Not Applicable
3.19	Directional pavement arrows shall be installed on all internal roads.	Patrick has reviewed the condition of direction arrows on roadways and scheduled repainting accordingly.	Observation
3.20	The design of all internal roadways shall be wide enough to accommodate through traffic and turning two-way traffic.	Through and turning two-way traffic accommodated.	Compliant
3.21	The design of the truck marshalling areas, driveways, and sight distances shall comply with *AS 2890.2-2002 Parking Facilities – Off-Street Commercial Vehicle Facilities.*	Applicable to construction period of the development etc.	Not Applicable

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.22	Vehicles associated with the development are not permitted to park, queue or stand on Penrhyn Road, Foreshore Road or the boat ramp car park and access road at any time.	On 5 December 2018 Patrick advised DPE of their understanding this condition relates to an iteration of 'Penrhyn Road' which no longer exists. Penrhyn Road used to run west alongside the Penrhyn Estuary to the public boat ramp but, following the grade separation, the road was substantially reconfigured and the land that this condition to (being the old Penrhyn Road and the boat ramp) now forms part of the Hutchison Rail Terminal. It is noted the section of road more recently referred to as Penrhyn Road, at the time of issuing DA-453, was known as the 'Inter-Terminal Access Road'. Patrick advised this condition was replaced by DA-494 B2.18. DPE replied 7 December 2018 and advised no further questions at this stage.	Not Applicable
3.23	No parking shall be permitted on the internal roadways outside the designated parking areas.	Patrick does not permit parking of vehicles on internal roadways within the terminal.	Compliant
3.24	All trucks entering the development shall be wholly contained within the site before being required to stop.	Trucks entering the site are contained within the site before being required to stop.	Compliant
3.25	The use of landscaping shall not affect driver sight distance for vehicles entering or exiting the site.	Maintenance of landscaping is periodically carried out.	Compliant
	Water Quality Impacts		
	Erosion and Sediment Control		
3.26	[9] The proposed works shall be carried out so that: (a) No materials are eroded, or likely to be eroded, are deposited, or likely to be deposited, on the bed or shore or into the waters of Botany Bay; and (b) No materials are likely to be carried by natural forces to the bed or shore or into the waters of Botany Bay.	Applicable to construction period of the development etc.	Not Applicable

[9] Waterways Authority General Terms of Approval

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.27	[10] Any material that does enter Botany Bay shall be removed immediately.	Applicable to construction period of the development etc.	Not Applicable
3.28	[11] The Applicant shall prepare and implement a Soil and Water Management Plan, as required by condition 6.2 (a) of this consent, to manage erosion, sedimentation and other pollutants during construction of the proposed works. The plan shall be prepared by a suitably qualified person(s). Best practice methods shall be adopted for the on-site control of runoff, sediment and other pollutants during, and post, construction. The methods employed shall be in accordance with the relevant specifications and standards contained in the Department of Housing's Managing Urban Stormwater: Soils and Construction" Manual (1998) and any other relevant Council requirements.	Applicable to construction period of the development etc.	Not Applicable
3.29	[12] Any material that is to be stockpiled on site shall be stabilised to prevent contamination, erosion or dispersal of the material. Consideration should be given to covering stockpiles when not in use. The erosion, sediment and pollution control system shall be effectively maintained at or above design capacity for the duration of the works and until such time as all ground disturbed by the works has been stabilised and rehabilitated so that it no longer acts as a source of sediment.	Applicable to construction period of the development etc.	Not Applicable
3.30	[13] Demolition and construction works shall be carried out in a manner that minimises the potential for materials, including sediment and other pollutants to enter Botany Bay. In this regard, a combination of temporary measures such as tarpaulins, booms, silt screens and barriers may be required when carrying out particular works.	Applicable to construction period of the development etc.	Not Applicable
3.31	All soil and/or vegetation disturbed or removed from the site shall be disposed of to, or stored at, an appropriate location where it cannot be washed off the site.	Applicable to construction period of the development etc.	Not Applicable
3.32	All construction vehicles exiting the site, having had access to unpaved areas, shall depart via a wheel wash facility. Note: Under section 13TA of the Maritime Services Act, 1935, the Applicant is required to obtain the prior written approval of the Waterways Authority to pipe stormwater, excavate or remove soil, sand or other material from land within a distance of 10 metres from the mean highwater mark. Further details regarding this approval can be obtained from the Property Services Branch (Phone 9563 8808).	Applicable to construction period of the development etc.	Not Applicable

[10] Waterways Authority General Terms of Approval;

[11] Incorporates Waterways Authority and EPA General Terms of Approval - O 4.1

[12 & 13] Waterways Authority General Terms of Approval

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3	**Environmental Performance**		
	Pollution of Waters		
3.33	[14] Except as may be expressly provided by a licence issued under the *Protection of the Environment Operations Act 1997* in relation of the development, section 120 of the *Protection of the Environment Operations Act 1997* shall be complied with and in connection with the carrying out of the development.	In 2018 there were 60 'environmental' related events, of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident. The remaining events were contained within the terminal area and cleaned up without any discharge to the environment and have been classified as 'near miss - environmental'. **Finding -** One of these was classified as a minor water pollution incident: On 9 September 2018, at Berth 7 (covered by DA 453) a minor leak occurred. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day. With the poor visibility of the water between the wharf and the vessel it was difficult to see if any of the oil had entered the waters of the dock. As a precaution, absorbent booms were placed into the waters, when removed there was some residual oil adhering to the absorbent material. The actual quantity was difficult to determine. A detailed report was sent to the EPA, NSW Ports and DPW on the 18 and 19 September 2018.	**Non-Compliant**
	Concentration Limits		
3.34	[15] The concentration limit of a pollutant discharged at Point 1 of the existing licence, shall not exceed the concentration limits specified for that pollutant in the table in condition 3.36 of this consent.	Discharges from Point 1 are referenced in the EPL version dated 18 April 2011. Patrick requested in a letter to the EPA (15 April 2013) the removal of reference to Discharge Point 1 from the EPL. The current EPL (13 June 2017) and the previous EPL (31 March 2015) make no reference to water monitoring requirements.	Not Applicable
3.35	[16] Where a pH quantity limit is specified in the table in condition 3.36 of this consent, the specified percentage of samples shall be within the specified ranges.	As per 3.34 above.	Not Applicable

[14] EPA General Terms of Approval - L 1.1 and A 2.1;

[15] EPA General Terms of Approval - L 3.1

<table>
<tr><th>No.</th><th>Condition of Approval 453 - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>3.36</td><td>[17] To avoid any doubt, this condition does not authorise the discharge or emission of any other pollutants.
Discharge Location - Point 1<table><tr><th>Pollutant</th><th>Unit of Measure</th><th>100% Concentration Limit</th></tr><tr><td>Oil and Grease</td><td>mg/L</td><td>10</td></tr><tr><td>Total Suspended Solids</td><td>mg/L</td><td>30</td></tr><tr><td>pH</td><td>pH</td><td>6.5 – 8.5</td></tr></table></td><td>This discharge point was made redundant by the construction of the covered workshop area.
A Consent to Discharge Industrial Trade Wastewater (No. 24990) is in place with Sydney Water for discharges from this area.</td><td>Not Applicable</td></tr>
<tr><td></td><td colspan="3">Acid Sulfate Solids</td></tr>
<tr><td>3.37</td><td>[18] In the event that acid sulfate soils are encountered during the works, all works with the potential to disturb the material are to cease. The Applicant shall notify the Waterways Authority immediately and prepare and submit an acid sulfate soils management plan to the Waterways Authority for approval prior to any work re-commencing. The management plan shall be prepared in accordance with the NSW Acid Sulfate Soils Manual.</td><td>Applicable to construction period of the development etc.</td><td>Not Applicable</td></tr>
<tr><td>3.38</td><td>[19] The Applicant shall not cause, permit, or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing, or disposal; or any waste generated at the premises to be disposed at the premises, except as expressly permitted by a licence issued by the EPA under the Protection of the Environment Operations Act 1997. This condition only applies to the storage, treatment, processing, reprocessing, or disposal; or any waste generated at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.</td><td>A Waste Management Plan (V0.4, 2015) is available as part of OEMP on website.
http://www.patrick.com.au/environment-management
EPL 6962 Condition L2 allows Patrick to receive types of waste at the premises. Records of waste oils and filters, transporters and waste oil receival locations are maintained in a Waste Register.</td><td>Compliant</td></tr>
</table>

; [16] EPA General Terms of Approval - L 3.2,

[17] EPA General Terms of Approval - L 3.3;

[18] Waterways Authority - General Terms of Approval;

[19] EPA General Terms of Approval - L 5.1 and L 5.2

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.39	[20] Except as expressly permitted by a licence issued by the EPA under the *Protection of the Environment Operations Act 1997*, only the hazardous and/or industrial and/or Group A waste listed below may be generated and/or stored at the premises: (a) waste oil/water, hydrocarbons/water mixtures or emulsions; and (b) grease trap waste.	No additional waste to those listed in this condition are known to have been generated or stored at the premises during the reporting period. Waste generated from Maintenance activities are classified as J120 waste oil/water, hydrocarbon mixtures or emulsions. Records are available.	**Compliant**
3.40	[21] The quantity of hazardous and/or industrial and/or Group A waste generated on the premises shall not exceed 200 tonnes per year.	Hazardous waste generated at the terminal (refer to PBT ex Waste Register): • 2016 –63.4 tonnes (56.4 waste oil + 7 waste oil filters) • 2017 – 55 tonnes (36 T waste oil + 19 T waste oil filters) • 2018 – 44.5 tonnes (40.1 T waste oil + 4.4 T waste oil filters)	**Compliant**
3.41	[22] The quantity of hazardous and/or industrial and/or Group A waste stored on the premises shall not exceed 70 tonnes at any one time.	Hazardous waste – maximum quantity stored at any one time (refer to PBT Waste Register): • 2016 –maximum quantity stored = 7 tonnes collected 17-Mar-16 • 2017 – maximum quantity stored = 5.8 tonnes collected 23-Mar-17 • 2018 – maximum quantity stored = 10.8 tonnes collected 12-Mar-18	**Compliant**
3.42	A designated area for the storage and collection of waste and recyclable materials shall be provided on the site. Details of this shall be provided in the Waste Management Plan required under condition 6.4 (d) of this consent.	Designated waste and recycle collection bins are provided at the Maintenance Workshop / Building, and the Tower / Administration Building. A Waste Management Plan (WMP) – OEMP, Appendix G was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). A copy of the WMP (OEMP, Appendix G) is available on the Patrick website: http://www.patrick.com.au/environment-management	**Compliant**

[20] EPA General Terms of Approval - L 5.3;

[21] EPA General Terms of Approval - L 5.4;

[22] EPA General Terms of Approval - L 5.5

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.43	All wastes and material generated on the site during construction and operation shall be classified in accordance with the EPA's *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* and be disposed of to a facility that may lawfully accept the waste.	The process for waste classification and management is outlined in Table 2 and Section 3.4 of the Waste Management Plan (WMP), reviewed January 2015. Waste streams are identified in Section 3.3. An agreement is in place with Cleanaway, a licenced waste contractor, to collect used oil filters and waste oil at least monthly. Waste classifications are provided on documentation left by the designated waste contractor.	**Compliant**
3.44	The Applicant shall be responsible for involving and encouraging employees and contractors to minimise domestic waste production on site and to reuse/recycle where possible.	The Waste Management Plan identifies waste streams on site and describe Patrick's requirements for the management of waste streams, waste minimisation and avoidance, and waste receipt and handling. Maintenance department recycles oily waste, and the site recycles cardboard and paper. In 2018 the site induction was revised to include recycling practices.	**Compliant**
	Air Quality Impacts		
	Dust Emissions		
3.45	[23] The Applicant shall design, construct, operate and maintain the development in a manner which minimises or prevents the emission of dust from the site.	Controls are in place to reduce dust generation and emissions are documented in Section 5.2 of the OEMP, located on Patrick's website: http://www.patrick.com.au/environment-management • roadway sweeping along the wharf is conducted routinely; • the site is covered in hardstand with minimal landscaped areas; and • Excavated material is removed from site as soon as practicable otherwise a covering is installed and maintained to secure the material and reduce dust emissions.	**Compliant**
3.46	All trafficable areas and vehicle manoeuvring areas in or on the premises shall be maintained, at all times, in a condition that will minimise the generation, or emission from the premises, of windblown or traffic generated dust.	See condition 3.45 above.	**Compliant**

[23] EPA General Terms of Approval - O 3.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.47	During construction of the development, the Applicant shall ensure that all vehicles entering or leaving the site, carrying a load that may generate dust, are covered at all times, except during loading and unloading. Any such vehicles shall be covered or enclosed in a manner that will prevent emissions of dust from the vehicle.	Applicable to construction period of the development etc.	Not Applicable
	Ventilation		
3.48	The details of any mechanical ventilation and/or air conditioning for the development must be certified by a competent person, in accordance with Council's requirements, the BCA and relevant Australian Standards, and to the satisfaction of the PCA prior to commencement of any work related to those activities.	Applicable to construction period of the development etc.	Not Applicable
	Hazard and Risk Impact		
3.49	The Applicant shall not store or handle Dangerous Goods of Class 2.3, toxic compressed or liquefied gases above the quantities stored or handled in 1995/96 except in accordance with recommendations 1.1 and 1.2 in the Port Botany Land Use Safety Study (1996).	As a reference, during the 1995/1996 period 825 tonnes (average value) of Class 2.3 Dangerous Goods were transited through Port Botany. From 1 September 2017 to 31 August 2018 there were 163 tonnes of Class 2.3 dangerous goods transited through Berths 7, 8 and 9 of Patrick's terminal which is well under the 825 tonnes limit required under this condition. (For the same period a total of 253 tonnes of Class 2.3 transited thru the entire terminal (including Berth 6)).	Compliant

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.50	At least two months prior to the commencement of the proposed development or within such further period as the Director-General may agree, the Applicant shall prepare and submit for the approval of the Director-General the studies set out under (a) to (d) below. (a) FINAL HAZARD ANALYSIS - A final hazard analysis (FHA) of the proposed development. The analysis should be prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6, "Guidelines for Hazard Analysis"; (b) TRANSPORT OF HAZARDOUS MATERIALS -Arrangements covering the transport of hazardous materials including details of routes to be used for the movement of vehicles carrying hazardous materials to or from the proposed development. The study shall be carried out in accordance with the Department's draft "Route Selection Guidelines". Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies. The study shall use the actual and projected dangerous goods movements from 1996/96 to 2016 to and from the site. In this regard particular attention is required to the future Class 2.3 toxic gases quantities, as detailed under condition 3.49 of this consent. (c) EMERGENCY PLAN - A comprehensive emergency plan and detailed emergency procedures for the proposed development. This plan shall include detailed procedures for the safety of all people inside and outside the development who may be at risk from the development. The plan shall be in accordance with the Department's Department of Infrastructure, Planning and Natural Resources Page 19 of 39 DA-453-12-2002-i Hazardous Industry Planning Advisory Paper No. 1, "Industry Emergency Planning Guidelines"; and (d) SAFETY MANAGEMENT SYSTEM - A document setting out a comprehensive safety management system, covering all operations on-site 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 procedures. Records shall be kept on-site and shall be available for inspection by the Director-General upon request. The Safety Management System shall be developed in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 9, "Safety Management".	(a) Sydney Ports Corporation – Port Botany Expansion Preliminary Hazard Analysis, revision 7, 9 June 2004. (b) Port Botany Expansion EIS – Appendix P, Traffic and Landside Transport Study for Proposed Port Botany Expansion (June 2002) (c) An Incident Management and Investigation Procedure has been developed forms Appendix I to the OEMP, and the Emergency Response Plan and Emergency Response Procedures (October 2015) and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones DPE) to Mr Paul Jerogin (Lend Lease)). The ERP is available on Patrick's website - http://www.patrick.com.au/environment-management (d) Patrick's HSE Management System covers operations on-site and associated transport activities involving hazardous materials. The document specifies all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to procedures.	Compliant

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.51	One month prior to the commencement of operation of the development, the applicant shall submit to the Director-General, a compliance report detailing compliance with conditions 3.49 and 3.50 of this consent, including: (a) dates of study submission, approval, and commencement of operations; (b) actions taken or proposed, to implement recommendations made in the studies; and (c) responses to each requirement imposed by the Director-General under condition 3.54 of this consent.	Confirm with DPE compliance reports have been received.	**Observation**
	Incident Report		
3.52	Within 24 hours of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment, a report shall be supplied to the Department outlining the basic facts. A further detailed report shall be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report must be submitted to the Director-General no later than 14 days after the incident or potential incident. The Applicant shall maintain a register of accidents, incidents and potential incidents. The register shall be made available for inspection at any time by the independent hazard auditor, the Director-General and Council.	OEMP Table 4 also sets out reporting requirements. The Emergency Response Plan (ERP) is available as part of OEMP on Patrick's website: http://www.patrick.com.au/environment-management The terminal's escalation matrix (revised 17 May 2018) has been updated to include the notification and reporting process the frontline managers, such as the duty shift managers are to follow i.e. notify regulators of actual or potential environmental incidents / near misses with the potential to impact people and/or the environment. In 2018 there were 60 'environmental' related events, of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident. One of these occurred on the 9 September 2018, at Berth 7 (covered by DA 453) a minor leak occurred. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day. A detailed report was sent to the EPA, NSW Ports and DPW on the 18 and 19 September 2018. **Finding -**The DPE was notified of the incident on 10 September approx. 30hrs after the incident was reported to the EPA.	**Non-Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Hazard Audit		
3.53	Twelve months after the commencement of operations of the proposed development or within such further period as the Director-General may agree, the Applicant shall carry out a comprehensive hazard audit of the proposed development and within one month of the audit submit a report to the Director-General. The audit shall be carried out at the Applicant's expense by a duly qualified independent person or team approved by the Director-General prior to commencement of the audit. Further audits shall be carried out every three years or as determined by the Director-General and a report of each audit shall be submitted to the Director-General within one month of the audit. Hazard audits shall be carried out in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 5, "Hazard Audit Guidelines". The audit shall include a review of the site safety management system and a review of all entries made in the incident register since the previous audit.	In 2016, DPE agreed the 3-yearly audit could be undertaken by Planager (a DPE approved independent safety auditor) in 2017. Report of the 2017 Hazard Audit of Patrick Port Botany Terminal, NSW was issued October 2017 (Planager). A copy of the final report was emailed to the stakeholders including the DPE.	**Compliant**
	Further Requirements		
3.54	The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from the reports submitted in respect of conditions 3.50 (a) to (d) inclusive, within such time as the Director-General may agree.	No requirements apply.	**Not Applicable**
3.55	[24] Foreshore landscaping shall be comprised of locally indigenous species, which represents the original plant communities that would have been found along the foreshore in the vicinity of the site.	No requirements apply.	**Not Applicable**
3.56	[25] A suitably detailed landscape plan shall be provided to the Waterways Authority prior to a Part 3A Permit being issued. The plan shall identify the location and species of trees at the site, measures to protect them from damage during the works and specific details of additional landscaping to be carried out including location and numbers of species to be planted.	No requirements apply.	**Not Applicable**

[24 & 25,] Waterways Authority General Terms of Approval

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
3.57	[26] A Vegetation Management Plan shall be prepared in accordance with condition 6.4 (b) of this consent. The Plan shall detail the proposed methods to be used to maintain the revegetated areas after completion of the works. The Plan shall be submitted to the Waterways Authority prior to a Part 3A Permit being issued.	A Vegetation Management Plan (VMP) has been developed and forms Appendix H to the OEMP. The VMP is available on Patrick's website: http://www.patrick.com.au/environment-management	Compliant
3.58	All noxious weeds, as listed under the NSW Noxious Weed Act 1993, on site shall be removed during construction and operation of the development.	Refer to Condition 3.57	Compliant
3.59	Appropriate weed management for the site, especially landscaped areas, shall be undertaken for the life of the development. Details of this shall be included in the Vegetation Management Plan required under condition 6.4 (b).	Refer to Condition 3.57	Compliant
3.60	The Applicant shall install, operate and maintain an irrigation system throughout all landscaped areas. Such a system shall provide full coverage to all landscaped areas with no overspray onto hard surfaces. Details of the irrigation system proposed shall be included in the Vegetation Management Plan required under condition 6.4(b) of this consent. The system shall comply with all relevant Australian Standards. Note: It is recognised that some irrigation is necessary, however, the Applicant is encouraged to reduce the dependence on irrigation by planting trees and shrubs that are endemic to the area and capable of withstanding low levels of water as reflected in condition 3.60 of this consent.	There is currently no irrigation system on site, based on the low water tolerant trees, shrubs and grasses planted. The VMP is available on the Patrick website: http://www.patrick.com.au/environment-management Landscaping of the area below Ramp D (also known as the Undercroft) is no longer applicable as this leased area was returned to NSW Ports on 14 September 2018.	Not Applicable
3.61	The Applicant must ensure that all external lighting associated with the development is mounted, screened, and directed in such a manner so as not to create a nuisance to surrounding properties or roadways. The lighting shall be the minimum level of illumination necessary and shall comply with *AS 4282 1997 - Control of the Obtrusive Effects of Outdoor Lighting*.	During 2018 no complaints are known to have been received by Patrick in relation to lighting. There are no nearby residences and the site is not located close to a public road where lighting may be a nuisance issue.	Compliant

[26] Waterways Authority General Terms of Approval

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Staff Induction		
3.62	The development's staff induction program shall incorporate special instructions relating to noise control and related "on the job" training, as deemed appropriate. Such training shall ensure that all staff involved in the operation of the terminal's mobile equipment, such as the straddle carriers, reach stackers and forklift trucks, and the gantry cranes and quay cranes, are aware of the need to ensure the following: (a) The correct placement and/or lowering of containers to minimise potential adverse noise impacts and specifically the control of transient impact noise; (b) The site's environment officer shall carry out routine inspections during the day, evening and night. Individual operations staff shall be assessed to determine the performance rating on each staff member and his or her duties; and (c) That each employee is made aware that one of the conditions of his or her continued employment shall be compliance with the site's noise emission goals and guidelines relating to the operational impact noise reduction. Those documented conditions will form an integral part of the project's Environmental Quality Assurance Program.	Environmental Training requirements are specified in section 4.4 of the OEMP on Patrick's website: http://www.patrick.com.au/environment-management Employees, contractors and sub-contractors are required to undertake an induction prior to commencing work on site. Following the 2017 Audit the site induction was significantly revised (including additional environmental details) and rolled out across the terminal starting June 2018.	**Compliant**
	Telephone Hotline		
3.63	Prior to the commencement of construction, the Applicant shall establish and list with the telephone company a 24-hour free call complaints contact telephone number. The Applicant shall provide the telephone number to the Department, EPA and Council and written notification shall be given to the surrounding residents. The aim of the complaints line is to enable any member of the action to the complaint within two hours, 24 hours per day for the duration of construction and operation of the development.	A 24-hour 7-days a week Ph (02) 9493 0308 is available to external parties to make enquires, concerns or complaints to Patrick, this phone number is displayed: • At the terminal's outside gate (B105A) • On the Patrick website: http://www.patrick.com.au/environment-sustainability A call made to the Patrick Concerns and Enquires line is answered by the terminal's ESC Manager. The phone number is routinely tested. Phone calls received related to an environmental concern or enquiry is recorded in the terminal's Public Comment, Inquires & Complaints Register.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Complaints Register		
3.64	The Applicant shall record details of all complaints received in an up-to-date Complaints Register. The Register shall record, but not necessarily be limited to: (a) the date and time of the complaint; (b) the means by which the complaint was made; (c) any personal details of the complainant that were provided, or if no details were provided, a note to that effect; (d) the nature of the complaints; (e) any action(s) taken by the Applicant in relation to the complaint, including any follow-up contact with the complainant; and (f) if no action was taken by the Applicant in relation to the complaint, the reason(s) why no action was taken. The Complaints Register shall be made available for inspection by the Director-General, EPA and Council upon request. The Applicant shall also make summaries of the register, without details of the complainants, available for public inspection.	Contact details and complaints line are available at: http://www.patrick.com.au/environment-sustainability Patrick's four 2018 Community Feedback Quarterly Reports are available on its website: http://www.patrick.com.au/environment-monitoring-reporting The Public Comments, Inquires & Complaints Register (for 2018) is available for inspection and a summary appears in Section 7 of this report.	**Compliant**
3.65	The payment of a Development Control fee to Council in accordance with Council's Management Plan, prior to the issue of the Construction Certificate. Development Control $660.00	Applicable to construction period of the development etc.	**Not Applicable**
4	**Utilities and Public Works**		
4.1	The Applicant shall, prior to construction commencing, identify (including, but not limited to the position and level of service) all public utility services on the site, roadway, nature strip, footpath, public reserve or any public areas that are associated with, and/or adjacent to the site, and/or are likely to be affected by the construction and operation of the development.	Applicable to construction period of the development etc.	**Not Applicable**
4.2	The Applicant shall, prior to construction commencing, consult with the relevant provider of the utilities identified in condition 4.1 of this consent and make arrangements to adjust and/or relocate their services as required. The cost of any such adjustment and/or relocation of services shall be borne by the Applicant.	Applicable to construction period of the development etc.	**Not Applicable**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
4	**Utilities and Public Works**		
4.1	The Applicant shall, prior to construction commencing, identify (including, but not limited to the position and level of service) all public utility services on the site, roadway, nature strip, footpath, public reserve or any public areas that are associated with, and/or adjacent to the site, and/or are likely to be affected by the construction and operation of the development.	Applicable to construction period of the development etc.	Not Applicable
4.2	The Applicant shall, prior to construction commencing, consult with the relevant provider of the utilities identified in condition 4.1 of this consent and make arrangements to adjust and/or relocate their services as required. The cost of any such adjustment and/or relocation of services shall be borne by the Applicant.	Applicable to construction period of the development etc.	Not Applicable
4.3	Prior to commencement of construction, the Applicant shall provide documentary evidence from the utility providers identified in condition 4.1 of this consent, to the Director-General, confirming that their requirements have been satisfied.	Applicable to construction period of the development etc.	Not Applicable
4.4	All external work carried out on public property shall be in accordance with Council's requirements, except as otherwise permitted by this consent.	Applicable to construction period of the development etc.	Not Applicable
4.5	Prior to the issue of an Occupation Certificate, the Applicant shall obtain from Sydney Water a Section 73 Compliance Certificate under the Sydney Water Act 1994.	Applicable to construction period of the development etc.	Not Applicable

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
5	**Environmental Monitoring**		
	General Monitoring Requirements		
5.1	The results of any monitoring required to be conducted by the EPA's general terms of approval, or a licence under the *Protection of the Environment Operations Act 1997,* in relation to the development or in order to comply with the load calculation protocol shall be recorded and retained as set out in conditions 5.2 and 5.3 of this consent.	Noted	**Compliant**
5.2	All records required to be kept by the licence shall be: (a) In a legible form, or in a form that can readily be reduced to a legible form (b) Kept for at least four years after the monitoring or event to which they relate took place; and (c) Produced in a legible form to any authorised officer of the EPA who asks to see them.	Noise monitoring was carried per condition 3.3 above. Records are kept in a legible form and are available on request. The 2018 Bi-Annual Noise Monitoring Reports were submitted to NSW EPA and NSW Ports. Reports from 2016 onwards are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
5.3	The following records shall be kept in respect of any samples required to be collected: (a) The date(s) on which the sample was collected; (b) The time(s) at which the sample was collected; (c) The point at which the sample was taken; and (d) The name of the person who collected the sample.	Records of samples collected are maintained. The 2018 Bi-Annual Noise Monitoring Reports include the details of the noise emissions monitored and appear in the appendices of: • May 2018 • November 2018 Copies of the reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

<table>
<tr><th>No.</th><th>Condition of Approval 453 - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td></td><td colspan="3">Requirement to Monitor Concentrations of Pollutants Discharged</td></tr>
<tr><td>5.4</td><td>The Applicant shall monitor the discharge of pollutants at monitoring location Point 2. The Applicant shall monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in column 1 of the Table below. The Applicant shall use the sampling methods, units of measure, and sample at the frequency, specified in the columns of the Table below.
Monitoring Location - Point 2: Water and Land
<table>
<tr><th>POLLUTANT</th><th>UNITS OF MEASURE</th><th>FREQUENCY</th><th>SAMPLING METHOD</th></tr>
<tr><td>Oil and Grease</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Total Suspended Solids</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Turbidity</td><td>NTU</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Chemical Oxygen Demand</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Total Organic Carbon</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Total Petroleum Hydrocarbons</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Lead</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>Zinc</td><td>mg/L</td><td>Special Frequency 1</td><td>Representative</td></tr>
<tr><td>pH</td><td>pH</td><td>Special Frequency 1</td><td>Representative</td></tr>
</table>
Special Frequency 1 means a sample must be collected and analysed not more than one hour before the commencement of any discharge on any day and a further sample of the wastes being discharged not more than one hour after the commencement of the discharge on that day.
Note: The monitoring results collected in compliance with condition 5.4 for Point 2 can be used to determine compliance with the concentration limit specified in Condition 3.36 for discharge from Point 1.</td><td>Monitoring Location Point 2 was removed from EPL 6962 dated the 31 March 2015.
Discharges from Point 1 are referenced in the EPL version dated 18 April 2011. Patrick requested in a letter to the EPA (15 April 2013) the removal of reference to Discharge Point 1 from the EPL.
The current EPL (13 June 2017) and the previous EPL (31 March 2015) make no reference to water monitoring requirements.</td><td>Not Applicable</td></tr>
</table>

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
5.5	Monitoring for the concentration of a pollutant emitted to the air required to be conducted by the EPA's general terms of approval, or a licence under the *Protection of the Environment Operations Act 1997*, in relation to the development or in order to comply with the load calculation protocol shall be done in accordance with: (a) Any methodology which is required by or under the POEO Act 1997 to be used for the testing of the concentration of the pollutant; or (b) If no such requirement is imposed by or under the POEO Act 1997, any methodology which the general terms of approval or a condition of the licence or the protocol (as the case may be) requires to be used for that testing; or (c) If no such requirement is imposed by or under the POEO Act 1997 or by the general terms of approval or a condition of the licence or the protocol (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place. Note: The *Clean Air (Plant and Equipment) Regulation, 1997* requires testing for certain purposes to be conducted in accordance with test methods contained in the publication *"Approved Methods for the sampling and Analysis of Air Pollutants in NSW".*	The current EPL (13 June 2017) and the previous EPL (31 March 2015) make no reference to water monitoring requirements.	Not Applicable
5.6	[32] For each discharge point or utilisation area specified in condition 3.34 of this consent, the Applicant shall monitor the volume of liquids discharged to water or applied to the area.	Monitoring Location Point 2 was removed from EPL 6962 dated the 31 March 2015. Discharges from Point 1 are referenced in the EPL version dated 18 April 2011. Patrick requested in a letter to the EPA (15 April 2013) the removal of reference to Discharge Point 1 from the EPL. The current EPL (13 June 2017) and the previous EPL (31 March 2015) make no reference to water monitoring requirements.	Not Applicable

[32] EPA General Terms of Approval – M6.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Water Quality Monitoring and Compliance Reporting		
5.7	[33] Within 6 months of consent being granted and every 6 months thereafter, the Applicant shall submit a report to the EPA containing the following information: (a) A pollutant inventory that qualifies waters discharged from the site. This shall include identification of all water pollutants likely to be discharged from each final stormwater pit on the 11 stormwater lines serving the container handling operation area within the site. The water pollutants shall include but are not limited to: total phenolics, polycyclic aromatic hydrocarbons, oil and grease, total petroleum hydrocarbons, total organic carbon, biochemical oxygen demand, chemical oxygen demand, pH, zinc, copper, lead, cobalt, chromium, manganese, cobalt, nickel and iron; (b) Identify all existing and potential sources of water pollutants from the areas that drain into the 11 stormwater lines serving the container handling operation area within the site; (c) Quantify the concentration of pollutant types identified as part of the pollutant inventory as prescribed in subclause (a) of this condition. The quantification of pollutants shall be undertaken by collecting a grab sample within the first hour of a discharge and at hourly intervals after the commencement of that discharge for at least three hours after the initial sample was taken; and (d) A statement of whether identification and quantification of pollutants in stormwater discharges that have been developed in accordance with the water quality objectives as specified in the Water Quality Guidelines for Fresh and Marine Waters published by Australian and New Zealand Environment and Conservation Council.	As referred to in the 2017 AEMR reference to this requirement has been removed from EPL 6962 due to the Maintenance Workshop being expanded to include the former Maintenance forecourt. Any waste water generated from workshop activities is treated via the AutoBatch Unit before being discharged to the trade waste (permitted by Sydney Water's Consent to Discharge Industrial Trade Wastewater No. 24990). The related action has been somewhat progressed with a draft review of this consent (and DA 494) with the intention to following up on initial brief and informal discussions had with the DPE with further discussions with DPE (and NSW Ports) to propose modifying either or both consents.	**Observation**

[33] EPA General Terms of Approval – E1.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Noise Monitoring and Compliance Reporting		
5.8	[34] Within 6 months of consent being granted and every 6 months thereafter, the Applicant shall submit a report to the EPA containing the following information: (a) Identification and ranking by sound power level (in 1/3 octave bands for any source with potentially undesirable noise character) all significant noise sources on site. This is to include container impact noise(s), audible alarms, all significant plant and equipment; (b) Identification of all noise sensitive receivers that may be affected by the operation, and select an appropriate number of representative receiver locations to represent all sensitive receivers; (c) The results of all noise measurements undertaken to assess compliance with condition 3.3 of this consent; (d) A statement of whether noise levels from all activities at the site comply with the specified noise limits at the representative receiver locations. The statement shall take into account tonal, impulsive and short duration noises originating from the facility; (e) Where noise levels have been assessed to exceed licence limits, a statement explaining the reason why this has taken place; and A statement of what feasible and reasonable additional measures may be implemented to further reduce noise levels below that specified in the licence.	Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits set by the EPA. The noise emissions received at the designated locations have been estimated via calculation. Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) received from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise levels in the community as having singularly come from Patrick's operations. The reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting Note: The noise limits within the EPL (13 June 2017) are different to those quoted here and in DA 494.	**Compliant**

[34] EPA General Terms of Approval – E1.1

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
6	**Environmental Management**		
	Construction Environmental Management Plan (CEMP) *(Continued)*		
6.1	The Applicant shall prepare and implement a Construction Environmental Management Plan (CEMP) to outline environmental management practices and procedures to be followed during the construction of the development. The Plan shall include, but not necessarily be limited to: (a) a description of all activities to be undertaken on the site during construction of the development, including an indication of stages of construction, where relevant; (b) statutory and other obligations that the Applicant is required to fulfil during construction, including all approvals, consultations and agreements required from authorities and other stakeholders, and key legislation and policies; (c) specific consideration of measures to address any requirements of the Department, EPA, Waterways Authority and Council during construction; (d) details of how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts; (e) a description of the roles and responsibilities for all relevant employees involved in the construction of the development; (f) the Management Plans listed under condition 6.2 of this consent. The CEMP shall be submitted for the approval of the Director-General prior to the commencement of construction of the development. Construction shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the CEMP to the EPA, Waterways Authority and Council as soon as practicable.	Not applicable as relates to construction phase of the development.	Not Applicable
	Soil and Water Management Plan		
6.2a	A Soil and Water Management Plan to detail measures to minimise erosion during construction of the development. The Plan shall include, but not necessarily be limited to…:	Not applicable as relates to construction phase of the development.	Not Applicable
	Construction Noise Management Plan		
6.2b	A Construction Noise Management Plan to outline measures to minimise impacts from the construction of the development on local noise levels. The Plan shall include, but not necessarily be limited to…:	Not applicable as relates to construction phase of the development.	Not Applicable

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Traffic Management Plan		
6.2c	A Traffic Management Plan (TMP) shall be prepared to the satisfaction of the Director-General and submitted at least two weeks prior to the commencement of construction of, or the modification to, of the truck and rail portals. The TMP shall specifically address the management of construction traffic and the alternate arrangements for truck/rail movements around the Terminal during construction.	Not applicable as relates to construction phase of the development.	Not Applicable
	Operational Environmental Management Plan (OEMP or Operational EMP)		
6.3	The Applicant shall prepare and implement an Operation Environmental Management Plan (OEMP) to detail an environmental management framework, practices and procedures to be followed during the operation of the development. The Plan shall include, but not necessarily be limited to: i. identification of all statutory and other obligations that the Applicant is required to fulfil in relation to operation of the development, including all consents, licences, approvals and consultations; ii. a description of the roles and responsibilities for all relevant employees involved in the operation of the development; iii. overall environmental policies and principles to be applied to the operation of the development; iv. standards and performance measures to be applied to the development, and a means by which environmental performance can be periodically reviewed and improved; v. management policies to ensure that environmental performance goals are met and to comply with the conditions of this consent; vi. the Management Plans listed under condition 6.4 of this consent; and vii. the environmental monitoring requirements outlined under section 5 (Environmental Monitoring) of this consent, inclusive. The OEMP shall be submitted for the approval of the Director-General no later than one month prior to the commencement of operation of the development, or within such period as otherwise agreed by the Director-General. Operation shall not commence until written approval has been received from the Director-General. Upon receipt of the Director-General's approval, the Applicant shall supply a copy of the OEMP to the EPA, Waterways Authority and Council as soon as practicable.	An OEMP was developed for Patrick terminal operations and was last updated in March 2015. The OEMP (and appendices) were approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). OEMP is available on Patrick's website: http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
6.4	As part of the OEMP for the development, required under condition 6.3 of this consent, the Applicant shall prepare and implement the following Management Plans:	Noted	Compliant
	Stormwater Management Plan		
6.4a	A Stormwater Management Plan to outline environmental management practices and procedures to be followed during the operation of the development in order to control and manage site drainage and stormwater. The Plan shall include, but not necessarily be limited to: i. detailed plans showing the design of the stormwater control infrastructure; ii. demonstration that the stormwater control infrastructure will conform with, or exceed all relevant Council requirements and guidelines; iii. description of the procedures for the installation, inspection and maintenance of the stormwater control infrastructure, including stormwater pollution control devices; and iv. description of the procedures to be undertaken if any non-compliance is detected.	A Stormwater Management Plan (SWMP), OEMP, Appendix F) was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The SWMP is available on Patrick's website: http://www.patrick.com.au/environment-management	Compliant
	Vegetation Management Plan		
6.4b	A Vegetation Management Plan to outline measures to ensure appropriate development and maintenance of landscaping on the site and revegetation in the vicinity of the boat ramp access road. The Plan shall include, but not necessarily be limited to: i. details of all landscaping to be undertaken on the site and revegetation in the boat ramp access road area, including details of additional features such as soil and mulch details, irrigation details, retaining wall details, fencing details, details of hard surfaces, and any other landscape elements in sufficient detail to fully describe the proposed landscape works; ii. details of existing and proposed utilities, as they relate to the development; iii. maximisation of flora species endemic to the locality in landscaping the site;	A Vegetation Management Plan (VMP), OEMP, Appendix H) was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The VMP is available on Patrick's website: http://www.patrick.com.au/environment-management	Compliant

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
6.4b	iv. details of existing and proposed utilities, as they relate to the development; v. maximisation of flora species endemic to the locality in landscaping the site; vi. details of the proposed weed management system; vii. identification and details of staff recreation areas; viii. details of car parking and measures to prevent vehicle encroachment onto landscaped areas; and ix. a program to ensure that all landscaped and revegetated areas are maintained in a tidy, healthy state.		
	Transport Management Plan		
6.4c	A Transport Management Plan to outline management of traffic conflicts associated with the operation of the development. The Plan shall include, but not necessarily be limited to: i. details of measures that would be implemented to minimise noise and amenity impacts on residential areas resulting from heavy vehicle movements; ii. outlines the monitoring procedures for major truck routes inbound and outbound from the site through the City of Botany Bay, as well as destinations within the City of Botany Bay; iii. procedures for monitoring the effectiveness and suitability of these measures, particularly the periodic and random monitoring of heavy vehicle routes; and iv. details of additional measures that would be implemented should be non-compliance be detected.	An Operational Traffic Management Plan (OTMP), dated 3 March 2015 was developed for the site as Appendix E to the OEMP. Patrick's OTMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The OTMP is available on Patrick's website: http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Waste Management Plan		
6.4d	A Waste Management Plan to outline measures to manage resource consumption resulting from the operation of the development. The Plan shall meet the requirements of Council, should there be any. The Plan shall include, but not necessarily be limited to: i. identification of the type and quantities of waste that would be generated; ii. description of measures and actions to be taken to minimise waste generated by the operation of the development; iii. description of how waste would be handled and stored during operation, and reused, recycled and, if necessary, appropriately treated and disposed of in accordance with the EPA's guidelines Assessment, Classification and Management of Liquid and Non-Liquid Waste; and iv. details of programs for involving and encouraging employees and contractors to minimise domestic waste production on the site and reuse/recycle where possible.	A Waste Management Plan (WMP), OEMP, Appendix G) was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones, (DPE) to Mr Paul Jerogin (Lend Lease)). The WMP is available on Patrick'a website: http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Operational Noise Management Plan		
6.4e	An Operational Noise Management Plan to outline measures to minimise impacts from the operation of the development on local noise levels. The Plan shall include, but not necessarily be limited to: i. identification of all major sources of noise that may be emitted as a result of the operation of the development; ii. specification of the noise criteria as it applies to the particular activity; iii. procedures for the monitoring of noise emissions; iv. protocols for the minimisation of noise emissions; v. description of procedures to be undertaken if any non-compliance is detected; vi. application of appropriate noise control measures to all the lifting equipment (gantry cranes, forklift trucks, etc.) that are proposed to be used on the site; and vii. the powering-down of locomotives standing on the rail sidings on the site until such time as the train is about to depart the site.	An Operational Noise Management Plan (ONMP), dated 15 January 2015 was developed for the site, and is attached to Patrick's OEMP, Appendix D. Patrick's ONMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The ONMP is available on the Patrick website: http://www.patrick.com.au/environment-management	**Compliant**
6.5	Within three years of the commencement of operation, and at least every three years thereafter, the Applicant shall undertake a formal review of the OEMP required under condition 6.3 of this consent. The review shall ensure that the OEMP is up-to-date and all changes to procedures and practices since the previous review have been fully incorporated into the OEMP. The Applicant shall notify the Director-General of completion of each review, and shall supply a copy of the updated OEMP to the Director-General, EPA, Waterways Authority and Council on request.	A finding in the 2017 AEMR states that 4 February 2016 was the date operations commenced at terminal. Patrick's Environmental Action Plan Calendar shows the review is underway e.g. Stormwater Management Sub-Plan, Bird Hazard Management Plan and the final issue target is to be completed by 31 March 2019.	**Observation**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
6	**Environmental Management**		
	Annual Compliance Report		
6.6	Within twelve months of the date of this consent, and annually thereafter, unless the Director-General directs otherwise, the Applicant shall submit a Compliance Report to the Director-General. The Compliance Report shall: (a) Identify all the standards, performance measures, and statutory requirements the development is required to comply with, including the conditions of this consent; (b) Review the environmental performance of the development to determine whether it is complying with these standards, performance measures, and statutory requirements. (c) Identify all the occasions during the previous year when these standards, performance measures, and statutory requirements have not been complied with; (d) Include a copy of the Complaints Register for the preceding twelve month period and indicate what actions were taken (or are being taken) to address complaints; (e) Include the detailed reporting from any monitoring requirements, and identify any trends in the monitoring over the life of the project; and (f) Where non-compliance is occurring, describe what actions will be taken to ensure compliance, who will be responsible for carrying out these actions, and when these actions will be implemented. (c) The Director-General may require the Applicant to address certain matters identified in the Annual Compliance Report. Any action required to be undertaken shall be completed within such period as the Director-General may agree. The Applicant shall provide a copy of the Annual Compliance Report to the EPA and Council. The report shall be made available to the public on request.	This annual environmental management report (as per D-494, C4.2) also includes the requirement of this condition to submit an annual compliance report. While for compliance purposes the date the Patrick site was deemed Operational was the 4 February 2016, for ease this AEMR covers the 12-month period from the 1 January to 31 December. The 2017 Annual Environmental Management Report (AEMR) is available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting The 2018 AEMR was submitted within 60 calendar days after the end of the reporting period (i.e. 28 February), and as per NSW Government – "Annual Review Guidelines", Post-approval requirements for State significant mining developments, October 2015. Following submission of this 2018 AEMR to NSW Ports and DPE it will be uploaded onto Patrick's website.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Independent Environmental Audit		
6.7	Within 12 months of commissioning the development and every three years thereafter, unless the Director-General directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit. The Independent Environmental Audit shall: (a) Be conducted by a suitably qualified, experienced, and independent person whose appointment has been endorsed by the Director-General; (b) Be consistent with ISO 14010 – Guidelines and General Principles for Environmental Auditing, and ISO 14011 – Procedures for Environmental Auditing, or updated versions of these guidelines/manuals; (c) Assess the environmental performance of the development, and its effects on the surrounding environment; (d) Assess whether the development is complying with the relevant standards, performance measures, and statutory requirements; (e) Review the adequacy of the Applicant's Environmental Management Plan, and Environmental Monitoring Program; and, if necessary (f) Recommend measures or actions to improve the environmental performance of the plant, and/or the environmental management and monitoring systems.	This audit is required to satisfy Condition 6.7 of DA 453 and Condition C4.5 of DA 494. DA 453 requires such an audit 12-months, after commissioning and then every 3 years. While DA 494 requires an independent environmental audit to be carried out every 12 months. It is on this basis and independent environmental audit will be carried out annually. The 2018 independent environmental audit was conducted by DPE approved auditor (Mr. Steve Fermio, WolfPeak) on the 17 January 2019. This audit satisfies the 3rd year requirement of this condition.	**Compliant**
6.8	Within 2 months of commissioning the audit, the Applicant must submit a copy of the audit report to the Director-General. After reviewing the report, the Director-General may require the Applicant to address certain matters identified in the report. The Applicant must comply with any reasonable requirements of the Director-General.	The final report was issued on 14 February 2019 and forwarded the same day onto NSW Ports and DPE. A copy of the audit report 2018 is available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	EPA Annual Return		
6.9	The Applicant shall provide an annual return to the EPA in relation to the development as required by any licence under the *Protection of the Environment Operations Act 1997* in relation to the development. In the return the Applicant shall: (a) report on the annual monitoring undertaken (where the activity results in pollutant discharges); (b) provide a summary of complaints relating to the development; (c) report on compliance with licence conditions; and (d) provide a calculation of licence fees (administrative fees and, where relevant, load based fees) that are payable. If load-based fees apply to the activity the Applicant will be required to submit load based fee calculation worksheets with the return.	The Annual Return for the period 1 April 2017 to 31 May 2018 was received by the EPA on 24 May 2018 i.e. within the timeframe specified by this condition.	**Compliant**
6.10	Where standards, guidelines or other documents are referred to in the conditions, the latest version of these standards, guidelines or documents shall apply, unless otherwise agreed by the Director-General.	Noted	**Compliant**
7	**Requirements of Botany Bay Council**		
	Vibration		
7.1	The construction and use of the premises shall not give rise to transmission of vibration at any affected premises that exceeds the vibration in buildings criteria outlined in the NSW EPA Environmental Noise Control Manual.	Noted	**Compliant**
7.2	All machinery shall be installed and/or housed in such a manner as to minimise the emission of noise and transmission of vibration outside the premises.	Noted	**Compliant**
7.3	Vibration levels induced by the use of the premises or any equipment or service associated with the premises shall not exceed 1mm/sec peak particle velocity when measured at the footing of any adjoining occupied building.	There are no occupied buildings adjoining the site that would be affected by vibration.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Storage of Chemicals / Dangerous Goods (Other than Shipping Containers)		
7.4	The storage and handling of flammable and combustible liquids for use on the site (other than shipping containers) shall be in accordance with *Australian Standard AS1940-1993 The Storage and Handling of Flammable and Combustible Liquids.*	The upgrade of the Maintenance Building and Workshop storage and handling of flammable and combustible liquids was completed as part of the redevelopment of the terminal. Routine site inspection identified consistencies in the storage of chemicals and fuels. The Maintenance department completed a site chemical storage audit in 2018. Bunded pallets for storage of waste oil were provided in the chemical store in 2018.	**Compliance**
	Storage of Waste Oil		
7.5	Waste oil shall be stored in a covered and bunded area prior to offsite recycling/disposal. Copies of receipts for the recycling of oil shall be kept onsite and made available to Council on request.	Waste oil is collected and stored inside the Maintenance Workshop in designated areas either a bunded area or on a bunded pallet. A recent quarterly inspection of the area identified consistencies in the storage of waste oils. Bunded pallets for storage of waste oil were provided in the chemical store in 2018.	**Compliance**
	Fuel Tanks and Fuel Filling Areas		
7.6	The fuel tank and fuel filling area shall be designed and operated in accordance with the Code of Practice for the Design, Installation and Operation of Underground Petroleum Storage Systems by the Australian Institute of Petroleum (CP4-1998) and *AS1940: 1993 The Storage and Handling of Flammable and Combustible Liquids.*	There are no underground fuel storage tanks located on the site.	**Compliant**
	Fuel Bowsers		
7.7	Fuel bowsers and service areas shall comply with the EPA's Environmental Guideline: Surface Water Management on the Covered Forecourt Areas of Service Stations.	As part of the redevelopment the Maintenance refuelling area was redesigned. Confirm the design complies with the EPA's Environmental Guideline: Surface Water Management on the Covered Forecourt Areas of Service Stations.	**Observation**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Bunding – Multiple Containers (Excluding Shipping Containers)		
7.8	The area used for the storage of chemicals/liquids in containers (other than shipping containers) shall be bunded. The bund (walls and floor) shall be constructed of impervious materials. The bund walls shall be a minimum of 100 mm high and be of a sufficient volume to contain 25% of the maximum volume of liquids likely to be stored within the bund. The bund shall be designed and installed in accordance with *AS1940-1993 The Storage and Handling of Flammable and Combustible Liquids.*	Site inspection confirmed chemical container storage bund consistent with this requirement.	**Compliant**
	Bunding - Tank		
7.9	The area used for the storage of chemicals/liquids in tanks shall be bunded. The bund (walls and floor) shall be constructed of impervious materials and shall be of sufficient volume to contain at least 110% of the volume of the tank(s). The bund shall be designed and installed in accordance with *AS1940-1993 The Storage and Handling of Flammable and Combustible Liquids.*	Site inspection confirmed chemical container storage bund consistent with this requirement.	**Compliant**
	Maintenance of Bunded Areas		
7.10	Bunded areas shall be properly maintained and all spillages and/or wastes within the bunded areas cleaned up as soon as practicable and disposed of in a manner that does not pollute waters.	Site inspection confirmed compliance with this requirement.	**Compliant**
	Traffic Bund		
7.11	All service entries to workshop areas shall be provided with a trafficable bund with a minimum height of 100 mm to prevent any spillage exiting the workshop area and entering the stormwater system.	Site inspection confirmed compliance with this requirement.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Spill Clean-up		
7.12	Sufficient supplies of appropriate absorbent materials shall be kept on site to recover any liquid spillage. Liquid spills shall be cleaned up using dry methods, by placing absorbent material on the spill, and sweeping or shovelling the material into a secure bin. Absorbent materials used to clean up spills shall be disposed of to an appropriately licensed waste facility.	**Emergency Spill Kits** are situated in key locations around the terminal including the Maintenance Workshop. **Spill Container** - containing additional absorbent materials, PPE and spill cleaning equipment is located in a designated location near the entrance to the quay line, accessible to maintenance and operations staff in an emergency. The spill container can also be lifted by a reach stacker and transported to the affected location. **Spill Trailer** - located in a designated area at the entrance to the quay line in readiness to be hooked up to an ITV/Mafi trailer and transported to the affected container. **Disposal –** Absorbent materials sued to clean up spills are collected and disposed of by licenced waste contractors.	**Compliant**
	Emergency Spill Response Management Plan		
7.13	The Applicant shall develop an Emergency Response and Incident Management Plan in consultation with the EPA and Council. The Plan must be approved by the Director-General prior to the commencement of operations and shall include the following: (a) list of chemicals and maximum quantities to be stored at the site; (b) identification of potentially hazardous situations; (c) procedure for incident reporting; (d) details of spill stations and signage; (e) containment and clean-up facilities and procedures; and (f) the roles of all staff in the Plan and details of staff training.	An Incident Management and Investigation Procedure has been developed forms Appendix I to the OEMP, and the Emergency Response Plan (ERP) and Emergency Response Procedures (November 2015) have been developed and attached to the OEMP as Appendix N and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The ERP is available on the Patrick website - http://www.patrick.com.au/environment-management	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Automotive / Workshop		
7.14	All servicing, mechanical repairs and detailing shall be conducted in a covered, bunded work area. All work areas, including workshops and lube bays, shall be graded into collection sumps and/or grated drains such that surface effluent generated within the workshop area is directed into a dedicated drainage system and disposed of to sewer in accordance with a Trade Waste Agreement from Sydney Water or collected for reuse/disposal by an EPA licensed waste contractor.	The Maintenance Workshop is covered, the floor is sealed and graded toward an internal drainage point, and key chemical storage areas bunded. All servicing, mechanical repairs and detailing are conducted in this area. Where mechanical equipment has to be worked on in-situ and likely to take some time the mobile plant is stored in a bunded area and were possible the automotive fluid is drained. Routine inspections are carried out. Spill kits containing absorbent materials are available in the Maintenance Workshop and on the Maintenance Break-down truck. Runoff from within the workshop is directed to a sump with oil/water separator and treated via the Auto Batch Unit. The waste water removed is disposed of via the sewer regulated under the Sydney Water's Consent to Discharge Industrial Trade Wastewater No. 24990. Waste oil and filter aid (ex the Auto Batch Unit) is collected and disposed via a licenced waste contractor and recorded on the terminal's Waste Register.	**Compliant**
	Storage of Mechanical Parts		
7.15	Automotive parts in contact with any automotive fluid shall be stored in a covered, bunded area that is graded into collection sumps and/or grated drains which are directed into a dedicated drainage system and disposed to sewer in accordance with a Trade Waste Agreement from Sydney Water or collected for reuse/disposal by an EPA licensed waste contractor.	As per condition 7.14.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Spray Painting		
7.16	All spray painting is to being carried out in a spray booth constructed and ventilated in accordance with *AS 1668.2-2002 – The Use of Mechanical Ventilation and Air-Conditioning* in Buildings. Exhausts from the spray booth shall be discharged through a single stack with a minimum height of 3 metres above the ridge of the building. The stack shall be located not less than 6 metres from any fresh air intake or openable able window. Disposal of waste water from wet scrubbing shall be disposed of in accordance with Sydney Water's Trade Waste Policy and Management Plan.	Spray painting was not conducted on site during the reporting period.	**Compliant**
	Maintenance of Filters		
7.17	All spray booth filters shall be regularly maintained to ensure emissions of air pollutants are minimised.	There is no permanent or temporary spray booth on site.	**Not Applicable**
	Stormwater		
	Vehicle Wash Bay		
7.18	Washing of vehicles shall be conducted in a wash bay that is roofed and bunded to exclude rainwater. The wash bay shall be installed in accordance with Sydney Water's requirements. A Permission to Discharge Trade Wastewater permit shall be obtained from Sydney Water before discharge to sewer commences. The wash bay shall be regularly cleaned and maintained. Alternative water management and disposal options may be appropriate where water is recycled, minimised or re-used on the site.	Two wash bays are located within a roofed and bunded area within the maintenance workshop with one wash bay connected via the Auto Batch unit to the trade waste. The workshop floor is sealed and graded toward an internal drainage point. The second wash bay is not connected to the trade waste and has not been used since it was installed. The single wash bay is operated under the conditions of Sydney Water's Consent to Discharge Industrial Trade Wastewater No. 24990.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Signage on Stormwater Drains		
7.19	Signs shall be displayed adjacent to all stormwater drains on the premises indicating that only clean water is allowed to enter these drains. Examples of possible signage include: 'Clean Rainwater Only', 'Clean water only - NO waste' or 'H_2O only'.	'Clean Rainwater Only' is being painted next to all stormwater drains on site. A trial is currently underway to monitor the longevity of the painted signs.	**Compliant**
	Maintenance of Stormwater Treatment Devices		
7.20	All wastewater and stormwater treatment devices (including drainage systems, sumps and traps) shall be regularly maintained in order to remain effective. All solid and liquid wastes collected from the devices shall be disposed of in a manner that does not pollute waters.	Stormwater drains wardens and Puraceptors have been included into the Maintenance scheduling system (Maximo).	**Compliant**
	Wastewater Recycling for Vehicle Washing		
7.21	All vehicle washing bays that recycle filtered and treated wastewater for re-use for vehicle washing shall meet the following requirements: (a) Have an appropriate method for the removal of contaminants such as grease, oil, sediment and cleaning agents before reuse of the wastewater and have an appropriate method for the disposal of wastewater contaminants. Have a floor that is sealed and graded to an internal drainage point, so that all wastewater and surface spillage is directed and drains to the approved treatment point; (b) Is roofed and bunded so that all uncontaminated stormwater from the roof areas and uncovered areas, are directed away from the bay; (c) At a minimum the bay constructed with a minimum 20 mm bund around the perimeter of the bay; (d) At a minimum the bay should be protected from the entry of external surface waters, by either; a minimum 2% change in grade; or combination of a minimum 2% grade change and a grated drainage system; (e) At a minimum the bay should have a roof that has a minimum height of 2.5m; (f) All uncontaminated stormwater/rainwater must be directed to the dedicated stormwater drainage systems; (g) Ensure all contaminants removed from the recycled wastewater are disposed of appropriately;	Patrick has installed 2 x 10,000L water storage tanks alongside the Maintenance Workshop; and 2 x 10,000 water storage tanks behind the tower/administration building. At both locations, the stored water is used for the single purpose to flush toilets/urinals. Recycled water has not been used for single vehicle wash bay in use. The second wash bay is not connected to the trade waste and has not been used since it was installed.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Removal Off-Site by an Authorised Liquid Waste Disposal Contractor		
7.21	(h) Have an appropriately designed wastewater/recycled water storage tank; (i) All contaminants and gross solids removed from the recycled water are disposed of appropriately; (j) Ensure that the wastewater recycling system is functioning as intended; and (k) Ensure that all wastewater is retained within the recycling system.		
7.22	All vehicle washing bays that will have all wastewater removed off site shall meet the following requirements: (a) Have a floor that is sealed and graded to an internal drainage point, so that all wastewater and surface spillage is directed and drains to the approved treatment and disposal point; (b) Roofed and bunded so that all uncontaminated stormwater from the roof areas and uncovered areas, are directed away from the bay; (c) At a minimum the bay should be constructed with a minimum 20 mm bund around the perimeter of the bay; (d) At a minimum the bay should be protected from the entry of external surface waters, by either; a minimum 2% change in grade; or combination of a minimum 2% grade change and a grated drainage system; (e) At a minimum the bay should have a roof that has a minimum height of 2.5 m; (f) All uncontaminated stormwater/rainwater must be directed to the dedicated stormwater drainage systems; (g) Have an appropriate capacity storage tank designed to hold all wastewater; (h) Keep and retain records for a period of five years, of when and how much water was removed by the authorised liquid waste disposal contractor when this occurs, on an annual basis. Provide a copy of the records to Council on request; and (i) That the water storage tank is maintained so that there are no leaks and is functioning as intended.	Two wash bays are located within a roofed and bunded area within the maintenance workshop with one wash bay connected via the Auto Batch unit to the trade waste. (The other wash bay is not connected to the trade waste since it has been installed.) The workshop floor is sealed and graded toward an internal drainage point. The single wash bay is operated under the conditions of Sydney Water's Consent to Discharge Industrial Trade Wastewater No. 24990. The vehicle wash bays are located inside the Maintenance Workshop, which is roofed and bunded. The floor is sealed and graded toward an internal drainage point.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
7	**Requirements of Botany Bay Council**		
	Discharge to the Sewer via Appropriate Pre-Treatment		
7.23	All vehicle washing bays that discharge to sewer shall meet the following requirements: (a) Discharges into the sewer requires a Permission to Discharge Trade Wastewater certificate issued by Sydney Water; (b) Have a floor that is sealed and graded to an internal drainage point, so that all wastewater and surface spillage is directed and drains to the approved treatment and disposal point; (c) Is roofed and bunded so that all uncontaminated stormwater from the roof areas and uncovered areas, are directed away from the bay; (d) At a minimum the bay should have a roof that has a minimum height of 2.5 m; (e) Have a roof that has a minimum height of 2.5 m; (f) Be constructed with a minimum 20 mm bund around the perimeter of the bay; (g) Be protected from the entry of external surface waters, by either; a minimum 2% change in grade; or combination of a minimum 2% grade change and a grated drainage system; (h) All uncontaminated stormwater/rainwater must be directed to the dedicated stormwater drainage systems; (i) Have a 1000 L general purpose pit; and (j) Carry out appropriate inspections and maintenance of the General Purpose Pit. The thickness of the sediment and oil levels, and outflow oil concentrations to be logged quarterly and submitted to Council. The pit is to be pumped out at least every 12 months or at more frequent interval as nominated by Council.	Two wash bays are located within a roofed and bunded area within the maintenance workshop with one wash bay connected via the Auto Batch unit to the trade waste. (The other wash bay is not connected to the trade waste and therefore not used.) The single wash bay is operated under the conditions of Sydney Water's Consent to Discharge Trade Wastewater No. 24990. The wash bays are located inside the Maintenance Workshop, which is roofed and bunded. The floor is sealed and graded toward an internal drainage point.	**Compliant**

No.	Condition of Approval 453 - Detail	Evidence	Assessment Rating
	Disposal of Wastewater to Land Incorporating Appropriate Treatment Devices		
7.24	All vehicle washing bays that discharge wastewater shall meet the following requirements: (a) The Applicant shall prove that the environmental conditions of the site are appropriate and provide appropriate professional site assessment information on the presence of environmentally sensitive areas on the building site, in the adjoining areas or within the downstream catchment; (b) Soil characteristics including soil permeability, depth to bedrock/hardpan, depth to high episodic water table, % coarse fragments; electrical conductivity; sodicity, cation exchange capacity, phosphorous absorption and any other Council requirement; (c) Site flood potential, exposure to sun and wind, slope, erosion potential, drainage, plant growth conditions; (d) Buffer distances from permanent surface waters, domestic groundwater wells, other waters, property boundaries, driveways, swimming pools and buildings; and (e) (e) Other site assessment details as required by Council.	Two wash bays are located within a roofed and bunded area within the maintenance workshop with one wash bay connected via the Auto Batch unit to the trade waste. (The other wash bay is not connected to the trade waste and therefore not used.) The single wash bay is operated under the conditions of Sydney Water Trade Waste Consent No. 24990. The wash bays are located inside the Maintenance Workshop, which is roofed and bunded. The floor is sealed and graded toward an internal drainage point.	**Compliant**
	Energy Efficiency Report		
7.25	An Energy Efficiency Compliance Report shall be prepared within 15 months of the issuing of the occupation certificate. The Report shall certify that energy efficiency measures have been installed and verify that the building's energy performance complies with Councils Energy Efficiency DCP. A copy of the Report shall be made available to Council on request.	At the time of issuing this AEMR it has been advised the report is likely to be part of the redevelopment project building design documents. **Finding:** In Patrick's 2017 AEMR it as observed that a copy of the Energy Efficiency Compliance Report could not be located, to date no copy has been found.	**Non-compliant**

Appendix C: Port Botany Expansion - Environmental Impact Statement (EIS)

Table C: PBE Environmental Impact Statement (EIS) - Assessment Predicted Rating

Category	Definition
Predicted	Largely as predicted / concluded
Partially Predicted	Partially as predicted / unknown / concluded
Not Predicted	Not predicted
Not Applicable	Not applicable

Table 18B: PBE Environmental Impact Statement (EIS) - Predictions and Conclusions

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 16 - Hydrology and Water Quality			
16.4.2	**Surface Water Quality**		
	Dredging and Reclamation Initial consolidation of material in the reclaimed area is expected to take up to two years. During this time the surface of the reclamation, if not protected, may be subject to erosion. To control erosion, the surface of the newly reclaimed area would be stabilised and profiled to form sediment detention basins to contain sediment runoff until the reclaimed area is covered with an impervious surface. These control measures would be documented as part of the Construction EMP for the project.	The developed / redeveloped areas are fully surfaced and sealed.	Predicted
	Erosion and Sedimentation Dredged or construction material stockpiles and active construction areas may be subject to erosion and sedimentation from surface runoff.	Between 15 December 2014 and 2 May 2016, a Control (Red Import Fire Ant) Order was in place at Port Botany, and prevented Patrick removing any excavated soils from site. Water spraying of soil stockpiles occurred. During 2018 there was no visible dust emissions reported to Patrick.	Predicted

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 17 - Groundwater			
17.6.2	**Groundwater Quality**		
	The operation of the new terminal is expected to have minimal effect on groundwater quality. Once operational, all terminal activities would be conducted in a manner to prevent contamination of surface or groundwater from operational activities. An Operational EMP would be developed in the detailed design phase to ensure an adequate standard is applied to contamination control for the operation of the new terminal.	The operational areas of the terminal are fully sealed. Patrick has prepared and implemented the following documents under Patrick's OEMP: • Appendix F – Stormwater Management Plan • Appendix G – Waste Management Plan And standard operating procedure: • *Storage & Handling of Hazardous / Dangerous Goods (PBT_OPS_SOP_04_03_v4, 12 September 2017)* These documents describe the controls which Patrick has in place to control spills/leaks, and control of waste generated as part of its operations. The Stormwater Management Plan further details how Patrick will ensure that any surface pollutants shall be captured and treated in order to minimise the potential contamination to groundwater or waters.	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 18 - Geology, Soils and Geotechnical			
18.4.2	**Soil Erosion**		
	The operations at the new terminal would take place on reclaimed and hard surfaced pavement. There is no requirement for soil removal or disturbance during operation of the terminal. Stormwater collection and treatment systems would be designed to capture surface water runoff from all impervious surfaces. Therefore, the operation of the new terminal is expected to have minimal effects on soil erosion. Soil in the vicinity of facilities outside the new terminal area, such as the proposed railway, boat ramp and car park, would be stabilised and erosion in these areas would be low.	Stormwater collection and treatment devices have been installed at the terminal and are operational, and routinely inspected / maintained. There is no evidence of soil erosion identified in the operational areas.	**Predicted**
18.4.3	**Sediment Contamination**		
	Leaks and spills from operations at the new container terminal would be contained by the proposed stormwater detention and treatment system. There is low potential for leaching of contaminants through the hard stand areas. Environmental management measures would be included in the Operational EMP	Patrick operates under a Stormwater Management Plan (SWMP), which forms Appendix F to the OEMP. Patrick's SWMP as part of the OEMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin, Lend Lease)). Stormwater collection and treatment devices have been installed at Patrick and are operational, and routinely inspected / maintained.	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 18 - Geology, Soils and Geotechnical			
18.5.2	**Operation**		
	The operation of the new terminal would have minimal effects on geology, soils and geotechnical issues. Once operational, all terminal activities would be conducted in a manner to prevent soil erosion and contamination from operational activities. A SWMP would be developed as part of an Operational EMP to ensure an adequate standard is applied to sediment control for the operation of new terminal. This plan would also address stormwater management and be prepared in accordance with NSW EPA requirements. The SWMP for operations would be incorporated in the Operational EMP. Management measures would include: • a first flush system to capture sediment and contaminants from surface water runoff from the new terminal; • treatment of surface water runoff from potential pollutant areas on the new terminal by a wastewater treatment system prior to discharge to sewer; • investigation of the feasibility of installation of sediment traps on Floodvale and Springvale Drains to reduce influx of sediment to Penrhyn Estuary; • emergency response plan for fuel, oil and chemical spills; and • storage and handling of all dangerous goods in accordance with Australian Standards, Dangerous Goods Regulations and NSW EPA requirements.	Patrick operates under a Stormwater Management Plan (SWMP), which forms Appendix F to the OEMP, and the Emergency Response (ERP) and Emergency Response Procedures (November 2015) have been developed and attached to the OEMP as Appendix N and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The OEMP and ERP are available on Patrick's website: http://www.patrick.com.au/environment-management.	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 19 – Aquatic Ecology			
19.6.1	**Potential Physical, Chemical and Biological Stressors**		
	Noise, Vibration and Light Vibration would occur as a result of construction and operation of the new terminal. Most aquatic animals would tend to habituate to the changes in noise and vibration, therefore, impacts could be considered as low.	The level of vibrations at Patrick would be similar with the types of activities conducted at the adjacent container terminals. Patrick's operations have not directly resulted in any increase of vessels in the Port Botany area.	**Predicted**
	Introduced Species There appear to be no aspects of the proposal likely to enhance the risk of the introduction of exotic species, other than an increase in risk associated with greater numbers of vessels using Port Botany. In terms of introduced species already in Botany Bay, there is some risk of changes in distribution associated with the proposed port expansion for: • *Caulerpa taxifolia* presently occurring along Foreshore Beach.	In the most recent *Port Botany Post Construction Environmental Monitoring - Seagrass Summary Report (dated April 2015)* there is no mention of the *Caulerpa taxifolia* in the Foreshore Beach or Penrhyn Estuary area. Refer to Port Botany Post Construction Environmental Monitoring, Annual Report 2016 (20 February 2018) uploaded on the Port Authority of New South Wales (formerly SPC) website: https://www.portauthoritynsw.com.au/media/2968/el1112046-port-botany-annual-report-2016-v2.pdf	**Predicted**
19.6.2	Management of the possible spread of *Caulerpa Taxifolia* would form part of a Construction and Operational EMP.	The management of *Caulerpa taxifolia* is not included in the Patrick OEMP as Patrick has limited control over activities outside of the terminal boundaries. The management and monitoring of *Caulerpa taxifolia* is addressed in section 2.1.5 of the **Penrhyn Estuary Habitat Enhancement Plan (March 2007)** https://www.portauthoritynsw.com.au/media/1084/pehep_report_execsummary.pdf	**Predicted**
19.7.2	**Marine Mammals**		
	With the current operation of the port it appears that marine mammals are able to co-exist with the port operations. A Marine Mammal Management Plan would, however, be prepared to ensure that the occurrence of marine mammals in the vicinity of the port during operations is appropriately managed. This would form part of the Operational EMP and would be prepared in consultation with NPWS.	Patrick's OEMP does not include a Marine Management Plan. The Port Authority of NSW (formerly Sydney Ports Corporation) monitors the presence and location of marine mammals in Botany Bay and through Harbour Control will advise commercial vessels and port operations if there are any marine hazard or emergency.	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 19 – Aquatic Ecology			
19.7.4	**Monitoring and Feedback**		
	Baseline Monitoring - Monitoring of the effects of the proposed port expansion on aquatic ecology would require investigation during construction and operation. Monitoring would be required before construction begins to compile appropriate baseline data. The proposed monitoring would be described in the Construction and Operational EMPs for the project and would include the measures described below: **The Water Column** – Following construction, water quality would be measured on a regular basis within Penrhyn Estuary. Indicators would include turbidity, dissolved oxygen, temperature, salinity, pH, nutrients, heavy metals and organic contaminants. In particular, organic contaminants (e.g. VHCs) would be measured in relation to an influx of contaminated groundwater into Penrhyn Estuary. **Seagrass, Algae and Associated Fauna** - Monitoring programs would be designed and implemented for seagrass during the construction and operational phases of the project. The seagrass indicators that would be considered include extent and coherence of beds (i.e. patchiness) and morphological characteristics, including shoot density, leaf length and width and extent of epiphytic growth. The occurrence and persistence of nuisance algae within Penrhyn Estuary as a result of nutrients from the catchments of Floodvale and Springvale Drains would be monitored to enable an appropriate management response. Finally, organisms utilising the compensatory seagrass beds would be monitored to evaluate diversity and abundance. It is suggested that a good indicator of this would be fish and mobile invertebrates (e.g. prawns) which can be readily collected using standard sampling procedures (e.g. seine nets).	Patrick's OEMP does not include monitoring aquatic ecology. The management and monitoring of the effects on specific aquatic ecology of Foreshore Beach and Penrhyn Estuary is covered in section 3 of the **Penrhyn Estuary Habitat Enhancement Plan (PEHEP) (March 2007)** located on the Port Authority of NSW (formerly SPC) website: https://www.portauthoritynsw.com.au/media/1084/pehep_report_execsummary.pdf. Monitoring of the PEHEP is managed by Cardno on behalf of the Port Authority of NSW – refer to: https://www.portauthoritynsw.com.au/sustainability-and-environment/penrhyn-estuary-rehabilitation/ The results are summarised in the **Port Botany Post-Construction Environmental Monitoring – Annual Report 2016, 20 February 2018** located on the Port Authority of NSW website: https://www.portauthoritynsw.com.au/media/2968/el1112046-port-botany-annual-report-2016-v2.pdf	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 20 - Terrestrial Ecology			
20.8.4	**Habitat Enhancement**		
	Saltmarsh Protection and Transplantation / Re-establishment A Vegetation Management Plan (VMP) detailing methodologies for saltmarsh excavation, storage, propagation and transplantation would be prepared and would be incorporated as part of the Construction and Operational EMPs for the project.	The habitat management and maintenance of saltmarsh is addressed in section 3.1.2 The Vegetation Management Plan is covered in Appendix C of the **Penrhyn Estuary Habitat Enhancement Plan (March 2007)** located on the Port Authority of NSW website: https://www.portauthoritynsw.com.au/media/1084/pehep_report_execsummary.pdf. The results are summarised in the **Port Botany Post-Construction Environmental Monitoring – Saltmarsh Summary Report April 2016, 11 August 2016** located on the Port Authority of NSW website: https://www.portauthoritynsw.com.au/media/2830/el1112046-port-botany-saltmarsh-summary-report-april-2016-final-v2.pdf	**Predicted**
	Mangrove Removal and Control A Vegetation Management Plan (VMP) detailing methodologies for mangrove removal and control would be prepared and would be incorporated as part of the Construction and Operational EMPs for the project.	The habitat management and maintenance of mangroves is addressed in section 3.1.3 of the **Penrhyn Estuary Habitat Enhancement Plan (March 2007)** located on the Port Authority of NSW website: https://www.portauthoritynsw.com.au/media/1084/pehep_report_execsummary.pdf. The results are summarised in the **Port Botany Post-Construction Environmental Monitoring – Annual Report 2016, 20 February 2018** located on the Port Authority of NSW website: www.portauthoritynsw.com.au/media/2968/el1112046-port-botany-annual-report-2016-v2.pdf	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter - 20 Terrestrial Ecology			
20.8.4	**Habitat Enhancement**		
	Control of Feral Animals The following two measures would assist in the control of feral animals at Penrhyn Estuary, these include: • ensure rubbish is placed in appropriately covered bins at all times. • ensure rubbish is regularly disposed; and • should shorebird monitoring during construction and operation of the Port Botany Expansion reveal feral cat and fox predation (on shorebirds) to be an ongoing issue, a 1080 fox baiting program should be initiated in consultation with NPWS and an expert shorebird ecologist. A Feral Animal Management Plan (FAMP) would be prepared as part of the Construction and Operational EMP for the Port Botany Expansion. The FAMP would address fencing and the management of garbage, particularly in the habitat enhancement areas, and the viability of a baiting program to be initiated in conjunction with NPWS.	Patrick's OEMP, Appendix G, Waste Management Plan (WMP) includes mitigation measures for the reduction of litter and regular emptying of enclosed rubbish bins, thereby assisting in the control of feral animals. The OEMP includes a Bird Management Plan (Appendix Q). http://www.patrick.com.au/environment-management. Any feral animals found on site are managed by contractors. A Feral Animal Management Plan (FAMP) has been drafted and will be uploaded with the revised OEMP and sub-plans.	**Partially Predicted**
20.10	**Conclusion**		
	Key impacts from the proposal on the 23 shore bird and one seabird species considered as regular or occasional visitors to Penrhyn Estuary could include disturbance to feeding and roosting from a change in lighting regime, increased movement, noise from construction and operation of the port (and associated infrastructure such as railway lines) and potential entry/exit flyway barriers due to the enclosure of Penrhyn Estuary.	The results of the Shorebird Monitoring Program - **Port Botany Post-Construction Environmental Monitoring.** **Shore Bird Reports** • Shorebird Peak Season Summary Report 2016-2017, February 2018 • Shorebird Off-Peak Season Summary Report September 2016, January 2017 Located on the Port Authority of New South Wales (formerly SPC) website: https://www.portauthoritynsw.com.au/sustainability-and-environment/penrhyn-estuary-rehabilitation/	**Predicted**

Chapter 21 - Traffic and Transportation			
21.10	**Conclusion**		
	It has been assumed that the volume moved by rail would be 30% of container throughput by 2006 and 40% by 2011.	Most landside freight movements to and from Port Botany are made by road. As part of the long-term strategy to increase rail freight throughput at Port Botany, the Australian government is supporting the development of a large intermodal terminal at Moorebank in Sydney's south-west. ACCC Container Stevedoring Monitoring Report 2017-18 (October 2017) https://www.accc.gov.au/publications/container-stevedoring-monitoring-report/container-stevedoring-monitoring-report-2017-18 NSW Ports announced on 27 November 2018 a $120 investment to boost rail capacity at Port Botany. NSW Ports is set to invest in 'on-dock' rail infrastructure capacity at each of the three container terminals at Port Botany, commencing the design phase in 2019. Investment will be staged, with stevedores being required to invest in rail operating equipment to meet target terminal capacities. Patrick is the first of the three stevedores to commit to the project. https://www.nswports.com.au/news/article/120-million-investment-to-boost-rail-capacity-at-port-botany	**Predicted**
Chapter 22 - Noise			
22.4.2	**Operation Noise Impacts – Sleep Disturbance Impacts**		
	All predicted noise levels would be below the external level of 65 dBA which some researchers consider would not result in awakening reactions.	An ONMP, dated 15 January 2015 was developed for the site, and is attached to Patrick's OEMP, Appendix D. In 2016 NSW EPA advised Patrick where levels exceed noise limits it was not deemed non-compliant based on the difficulty of attributing the detected noise emissions has having come from Patrick's operations. Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits set by the EPA. The noise emissions received at the designated locations have been estimated via calculation. Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) received from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise levels in the community as having singularly come from Patrick's operations. The reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 22 - Noise			
22.5.2	**Operation**		
	A Noise Management Plan containing environmental management measures to assess and minimise noise from the operation of the new terminal would be developed. The Noise Management Plan would be included in the Operational EMP for the new terminal. **Machinery Noise Control -** Noise level emissions would be a criteria for selection of new plant for the site. The quietest possible plant that satisfied the operational performance specifications would be selected and noise control kits fitted where required. Regular maintenance of machinery would be carried out to ensure optimal and efficient operation. **Equipment Alarms -** Audible safety alarms on some terminal equipment would be turned off during night hours (between 10.00 pm and 6.00 am) and replaced with visual alarms. It is understood that for certain types of equipment e.g. quay cranes (long travel alarm and high wind alarm) alarms are required to remain for safety reasons. In respect of other items of equipment, a safety assessment would be undertaken to identify where the audible alarms could be replaced with visual alarms without affecting safety. **Operator Awareness and Training -** Operator awareness and training would be regularly conducted. Good training and awareness of noise issues would be implemented to minimise poor cargo handling practices. **Complaints** - Complaints would be assessed and responded to in a quick and efficient manner. **Noise monitoring** – Noise monitoring would be conducted to assess impacts from the operation of the new terminal at locations most likely to be affected by the new terminal operations. The results of this monitoring would be discussed with the EPA and Planning NSW to identify any responses required, although the predicted noise levels would not be expected to occur for some years after the commencement of operations in about 2010. By this time, technological and operational changes are likely to be available which would reduce operational noise levels at the new terminal.	Patrick has prepared and implemented the following document under its OEMP - Appendix D, ONMP. Noise levels and noise control specifications are required to be considered when procuring new plant. Maintenance is carried out on a routine / regular basis in accordance with OEM and the equipment/plant history/risk. Maintenance is scheduled and managed via Patrick's MAXIMO system. During 2018 LED lights and low tonal devices (quackers) were installed across the fleet of mobile plant replacing connecting and/or reversing alarms, thereby reducing noise emissions to the working and local environment. Quay crane alarms for the movement of vessel hatch / deck lids have been standardised and positioned to be directing towards the ground (OEMP – Appendix D, ONMP, section 3.2.2). Patrick responds to all public comments, inquiries and complaints received – refer to this AEMR, Section 7 (Public Comments, Inquiries & Complaints Register); and Patrick's OEMP – Appendix D, ONMP, Section 3.3; and Appendix P – Complaints Management Process. In 2018, the Site Induction was updated to includes specific noise mitigation training and was rolled out in June 2018. *Continued*	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 22 - Noise			
	The Noise Management Plan would also contain the option for shore power to be provided to ships in the future. A Traffic Noise Management Plan would be developed for the new terminal. This plan would consider traffic route selection, traffic clustering and traffic rescheduling.	Patrick's OEMP – Appendix D, ONMP, refers to identifying opportunities to reduce operational noise include, but not necessarily limited to, section of equipment, engineering noise controls and share based power. Patrick has prepared and implemented in its OEMP, Appendix E – Operational Traffic Management Plan (OTMP) located on Patrick's website: http://www.patrick.com.au/environment-management Patrick's ONMP and OTMP as part of the OEMP were approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)).	**Predicted**
Chapter 23 - Air Quality			
23.8.2	**Operation**		
	Notwithstanding the fact that the proposed expansion is shown to result in acceptable impacts, the new terminal would be designed and constructed such that it could support the use of alternative energy for ships at berth (i.e. shore power), should ships be able to accept such power in the future. This would reduce ship emissions in the local area.	Patrick could potentially support the use of alternative energy for ships at berth (i.e. shore power).	**Partially Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 24 - Cultural Heritage			
24.8	**Assessment of Impacts During Operation**		
	During the operational phase of the Port Botany Expansion there would be no impacts on Aboriginal, European or maritime heritage resources in the primary or secondary study area	The Knuckle (i.e. Port Botany Expansion DA 494) was constructed on reclaimed land and the operational areas sealed. The remaining area of the terminal was redeveloped on existing sealed areas. During construction / redevelopment there were no heritage impacts reported.	**Predicted**
Chapter 25 - Visual Impact Assessment			
25.5	**Mitigation Measures**		
	Quay Crane specification – quay cranes for the new terminal would be approximately 50 m high. **Container Stacking height** – containers would not be stacked more than six high (18 m) and would typically be only three high (9 m), as is the case with the existing terminals. **Noise Wall** – the proposed noise wall near the edge of the new terminal would be approximately 4 m in height and would partially screen the operations of the new terminal when viewed from foreshore areas near the port.	Maximum height of the Patrick quay cranes of 107.1 m as per approval under the *Airports (Protection of Airspace) Regulations 1996* (APAR) (Ref: 12/5083) for the intrusion of three quay cranes into prescribed airspace for Sydney Airport. Approval was granted by Flysafe Aerodrome Precincts, Aviation and Airports Division of the Department of Infrastructure and Transport on 12 December 2012. Container stacking at Patrick's terminal will be no more than 3 high (as controlled by the RTCS software programming). A noise attenuation wall was constructed by Hutchison Ports and is located within Hutchison Ports rail site positioned between Hutchison's rail siding and the Penrhyn Estuary. The wall is 3 metres high when parallel to the railway siding, and 4 metres high along the northern and eastern sides of the Hutchison Terminal. Patrick's ONMP is currently under review (due 31 March 2019).	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 26 - Social Impact Assessment			
26.5.5	**Waste**		
	Operation A Waste Management Plan (WMP) would be prepared and implemented by the terminal operator(s) as part of the Operational EMP for the new terminal and would include initiatives for sustainable waste management. All waste discharged by ships at the new terminal would be managed through established waste management practices.	Shipping agents arrange for the collection of waste from ships. A Waste Management Plan (WMP) has been developed and forms Appendix G of the OEMP and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The WMP is located on Patrick's website: http://www.patrick.com.au/environment-management	**Predicted**
Chapter 28 – Preliminary Hazard Analysis			
28.10.1	**Mitigation Measures**		
	The following mitigation measures would be implemented to manage the hazards and risks described above: i. containers with dangerous goods would be handled and transported in accordance with the *Australian Standard 3846 (1998):* The *Handling and Transport of Dangerous Goods in Port Areas* and the *NSW Dangerous Goods (General) Regulation 1999;* ii. an Occupational Health and Safety Plan would be developed by the terminal operator(s) to address the handling and transport of dangerous goods during the operation of the new terminal; iii. a notification system for the arrival or delivery of dangerous goods would be implemented; iv. restrictions on the time dangerous goods are allowed to be held within the port would be applied, supported by a loading/unloading plan and arrangement of transport to/from the berths; v. various classes of dangerous goods would be separated by safe distances on the berth;	Mitigation measures include, but are not limited to: i. Standard Operating Procedure - *Storage & Handling of Hazardous / Dangerous Goods (PBT_OPS_SOP_04_03_v4)* prepared in accordance with AS3846 and the WHS Legislation (NSW Dangerous Goods (General) Regulation 1999 repealed; provisions saved under WHS Regulation). ii. As per item (i) above. iii. The Port Authority's ShiPS online system controls the movements of all dangerous goods (import and export) to the terminal. The Port Authority NSW DG Officer routinely audits terminals to ensure compliance with Red line and Green line cargo dwell times for DGs. iv. DGs are classified as Red line or Green line cargo in the ShiPS system and truck bookings are controlled to limit the duration that cargo is stored within the terminal. v. Patrick uses SPARC / RTCS software to program separation of dangerous goods storage and movements around the terminal. vi. During 2018, Patrick personnel involved with handling DG completed General Awareness & Maritime Function Specific (AMSA Accepted DG Training Course Amendment 38-16).	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 28 – Preliminary Hazard Analysis			
28.10.1	**Mitigation Measures** *(continued)*		
	vi. suitable container handling equipment would be used to minimise risk of dropped containers; vii. suitable container loading/unloading, handling and stacking systems would be employed to minimise double handling and attendant risk of damaging containers; viii. the facility would be fitted with adequate yard signage and warning systems for mobile equipment; ix. there would be adequate warning systems for ships moving in the vicinity of the facility; x. a first flush drainage system would be installed and maintained to contain spills and contaminated runoff; xi. bunds would be constructed around diesel storage tanks; xii. fire fighting equipment would be provided and personnel trained in fire fighting and evacuation procedures; and xiii. emergency and incident management procedures would be developed (refer to *Chapter 32 Emergency and Incident Management).*	vii. Patrick uses Quay Cranes, Auto Strads and reach stackers with spreaders which lift containers from the top. Quay Cranes and reach stackers have automated and manual systems to prevent containers from uncontrolled falls/drops; Auto Strads have automated systems to prevent containers from uncontrolled falls/drops. viii. Patrick's operations are designed to minimise double handling. ix. Patrick utilises line marking, signage and fish-eye mirrors around the terminal, and all terminal vehicles are fitted with flashing lights. x. Mobile plant is fitted with low tonal devices (quackers); and connecting alarms on Auto Strads have been disconnected and replaced with LED lights. xi. Patrick does not control the berthing of vessels this task is undertaken by the Pilot of Port Authority NSW and third-party tug and line service providers. xii. Patrick has installed Puraceptors, Gross Pollution Traps and drain wardens to contain spills and contaminated runoff; xiii. Bunding has been constructed around the above ground diesel storage tanks (trans-tanks); xiv. Fire Fighting equipment (i.e. fire extinguishers) is installed at the Patrick terminal and key workers trained in its use; and all workers inducted to the site evacuation procedures. xv. An Incident Management and Investigation Procedure has been developed and forms Appendix I to the OEMP. The Emergency Response Plan (ERP) and Emergency Response Procedures (November 2015) have been developed and attached to the OEMP as Appendix N and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease). The ERP is available on the Patrick website - http://www.patrick.com.au/environment-management	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 29 - Bird Hazard			
29.3.3	**Operation**		
	Sealed surfaces often provide ideal roost sites for large numbers of birds especially Silver Gulls. Bitumen surfaces provide a warm surface for roosting and are particularly attractive where areas are not subject to regular disturbance. These undisturbed open spaces have the potential to attract significant numbers of birds to the site, thereby potentially increasing the risk of bird strike at Sydney Airport. Areas illuminated at night are also likely to attract birds, especially Silver Gulls, as they provide a secure roosting environment and attract insects which birds feed upon. The additional port land may provide large areas of suitable roosting habitat for the Silver Gull. Flat surfaces of buildings, such as roofs, may provide suitable places for Silver Gulls to roost. Openings and ledges may provide roosting and nesting habitat for Feral Pigeons, Common Starlings, Common Mynas and other bird species associated with buildings. The pavements and buildings associated with the new terminal have the potential to attract significant numbers of birds to the site, thereby potentially increasing the risk of bird strike at Sydney Airport. It is therefore important to initiate deterrent strategies.	A Bird Hazard Management Plan has been developed for the site and forms Appendix Q to the OEMP. The Plan was conditionally approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The Bird Management Plan is located on Patrick's website: http://www.patrick.com.au/environment-management	**Predicted**
29.4	**Mitigation Measures**		
	A Bird Hazard Management Plan would be prepared for the construction and operation of the Port Botany Expansion to reduce the risk of increasing bird hazards arising from the proposal. The plan would be incorporated in the Construction and Operational EMP and would include: • measures to minimise the attraction of birds, especially high-risk species such as Silver Gulls, Australian Pelicans and Australian White Ibises; • use of deterrents to prevent the build-up of birds; • exclusion of activities that attract birds in certain areas; • measures to minimise disturbance of birds at Penrhyn Estuary; • education about bird hazards; and • monitoring.	Refer to 29.3.3 above	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 30 - Operational Aviation Issues			
30.4.2	**Assessment of Impacts – Operation**		
	Air Space There would be no fixed or mobile structures in the new terminal that would intrude into the OLS. **Light Spill** It is anticipated that light spill from the Port Botany Expansion would not adversely impact operations at Sydney Airport due to the following lighting design measures: • **High masts** - lighting would be directed down to the intended application area with minimal light spill outside the area boundaries, by using asymmetric distribution horizontal flat glass floodlights, and would comply with CASA requirements • **Quay cranes** - lighting of shuttle boom quay cranes would be specified as downlight type to meet civil aviation regulations. Lighting elements for access/egress stairs and gangways would be mounted horizontal (no tilt) and have internal shielding of the lamps to ensure correct cut off. Obstruction lights would be placed on cranes to mark these in accordance with civil aviation regulations (CAR Regulation 95). • **Buildings and associated areas** – buildings and other external areas would be lit with floodlights that have a similar cut off lighting performance to those mounted on high masts. Internal building lighting would be similar to that used at the airport terminal and at the existing port facilities. Therefore, these areas would have a negligible impact on operations at Sydney Airport. • **Roads** – cut off type road lighting and low level lighting elements would be used wherever possible to minimise light spill.	Maximum height of the Patrick quay cranes of 107.1 m as per approval under the *Airports (Protection of Airspace) Regulations 1996* (APAR) (Ref: 12/5083) for the intrusion of three quay cranes into prescribed airspace for Sydney Airport. Approval was granted by Flysafe Aerodrome Precincts, Aviation and Airports Division of the Department of Infrastructure and Transport on 12 December 2012. Patrick's terminal lighting has been designed and installed to comply with the requirements of the Development Consent (see Development Consent clauses C2.23 and C2.24 above) Quay Cranes are fitted with obstruction lights which operate on a 24/7 basis. The terminal (including the buildings and roads) utilises energy efficient lighting, and the windows of the new buildings are tinted. .	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 30 - Operational Aviation Issues			
30.5.2	**Mitigation Measures – Light Spill**		
	• lighting on board ships whilst berthed to be provided primarily by the shuttle boom quay cranes with supplementary lighting on board only being provided where necessary; • ships to be berthed facing a specific direction (e.g. north or south) and to only use floodlights mounted on the bridge. The appropriateness of this option could be tested by CASA through a fly-over of the existing Brotherson Dock; and • provide restrictive temporary shielding to any permanent ship mounted floodlights whilst the ship was docked.	Maritime Order 32 Schedule 1 (2) lighting requires adequate lighting during loading or unloading activities. Routinely vessels will be loaded/unloaded at night and require sufficient lighting to undertake the operations. When vessels are not under stevedore operations, the Quay Crane lights (except the beacon lights) will be switched off in order to minimise the light glare or distraction to pilots.	**Predicted**
Chapter 32 - Emergency and Incident Management			
32.1	**Introduction**		
	The future operator(s) of the new terminal, with advice from Sydney Ports Corporation, would prepare an ERIMP to manage these potential emergencies prior to the new terminal commencing operations. The purpose of the ERIMP would be to provide an organised and practised response to incidents and emergency situations to protect employees, the public and the environment.	An Incident Management and Investigation Procedure has been developed and forms Appendix I to the OEMP. The Emergency Response Plan (ERP) and Emergency Response Procedures (November 2015) have been developed and attached to the OEMP as Appendix N and approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The ERP is available on Patrick's website - http://www.patrick.com.au/environment-management	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 32 - Emergency and Incident Management			
32.2.4	**Specific Sub-Plans**		
	Spill Containment and Management The proposed new terminal would be equipped with emergency response equipment typically comprising absorbent materials, absorbent pads to block drainage points and protective equipment consisting of gloves, rubber boots, eye protection etc.	**Emergency Spill Kits** are situated in key locations around the terminal including the Maintenance Workshop. **Spill Container** - containing additional absorbent materials, PPE and spill cleaning equipment is located near the entrance to the quay line, accessible to maintenance and operations staff in an emergency. Maintenance's Break Down Truck is equipped with a spill kit. Spill kits are located in designated locations on site including the Maintenance workshop, refuelling bays and diesel storage tank-tainers. **Spill Trailer** - located in a central position on the quay line with a Mafi ITV attached, from this location the spill trailer can be more easily deployed to either ends of the 1400 m quay line to the affected container.	**Predicted**
Chapter 33 - Water and Wastewater			
33.2	**Water Usage**		
33.2.1	**Operation** Water used for operational activities that do not require potable water, would be sourced from treated surface water runoff stored in two 10,000 L tanks at the northern end of the new terminal. Operational reuse of this water would include maintenance activities, wash down and irrigation.	Patrick has installed water collection and storage tanks: • 2 x 10,000 litre tanks alongside the Maintenance Workshop; and • 2 x 10,000 litre tanks alongside Tower/Administration building. At both locations, the stored water is used for the single purpose to flush toilets/urinals.	**Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 33 - Water and Wastewater			
33.3	**Wastewater**		
33.3.2	**Operation** All trade waste generated during the operation of the new terminal would discharge to the Sydney Water Corporation sewerage system under a Trade Waste Agreement. The Trade Waste Agreement would determine the level of treatment required prior to discharge. All areas where wash down or maintenance activities are to be undertaken would be bunded and provided with sump pits, grit traps and oil/water separators. This would also be the case for any additional bunded storage areas, such as those used for refuelling and fuel storage. Water collected in these areas would be tested and disposed to the sewerage system, or if unsuitable for disposal to sewer would be disposed offsite by a licensed waste disposal contractor.	Sydney Waters Consent to Discharge Industrial Trade Wastewater (No. 24990) was issued to Patrick on 24 June 2015. Two wash bays are located within a roofed and bunded area within the Maintenance Workshop. A single wash bay is in operation whereby wastewater is collected in a pit with a separator unit for oil/water, pumped to the Auto Batch Unit and passed through filter aid material to trade waste. The second wash bay is not connected to the trade waste and therefore not used. Routine monitoring and testing is carried out by a 3rd party and the results reported to Sydney Water and Patrick.	**Predicted**
33.5	**Water and Wastewater Management**		
33.5	The following mitigation measures would be adopted for the proposed Port Botany Expansion: • water use and wastewater discharge at the site would be subject to a Water Resources Management Plan (WRMP), which would form part of the construction and operational EMPs. These plans would include water minimisation strategies as well as monitoring and testing schedules for wastewater as required; • clean, treated stormwater would be collected in two 10,000 L water storage tanks at the northern end of the new terminal to allow reuse for maintenance, wash down and irrigation; • dual flushing toilets, minimal flow shower heads and regular maintenance to identify leaking or dripping taps and pipes would be implemented during construction and operation; • monitoring and testing would be undertaken prior to discharge of treated wastewater, to ensure compliance with the site Trade Waste Agreement.	Patrick has installed 10,000 litre water collection and storage: • 2 x tanks alongside the Maintenance Workshop; and • 2 x tanks adjacent to the Tower/Administration building. At both locations, the stored water is used for the single purpose to flush toilets / urinals. Dual-flushing toilets and minimal flow shower-heads have been installed. Any leaking or dripping taps and pipes is repaired as soon as they have been identified. Monitoring and testing is in line with Sydney Water's Consent to Discharge Industrial Trade Wastewater (Ref No: 24990, 24 June 2015). The OEMP does not include a Water Resources Management Plan (WRMP).	**Partially Predicted**

Section	PBE Environment Impact Statement - Prediction / Conclusion	Environmental Impact Assessment / Evidence	Assessment Rating
Chapter 34 - Waste			
34.4	**Waste Management and Disposal**		
34.4.2	**Operational Waste** An Operational WMP would be developed and implemented for the new terminal in accordance with the requirements of the *Waste Avoidance and Resource Recovery Act* 2001, the *Protection of the Environment Operations Act* 1997, the EPA's *Environmental Guidelines: Assessment, Classification & Management of Liquid & Non-Liquid Wastes* (1999), the *Botany Bay DCP 29* and the *National Minimisation and Recycling Strategy*. The plan would be incorporated into the Operational EMP for the terminal. **Domestic Waste** Recycling facilities would be provided at the new terminal and in public recreation areas to maximise recycling of waste materials such as plastic and glass bottles/containers, aluminium cans and paper/cardboard. Separate bins would be provided for food waste and fish remains from fish cleaning facilities in the public recreation area. All domestic waste would be collected on a regular basis and transported off site for disposal to a licensed landfill or recycling facility as appropriate. Litter bins would be designed in accordance with the bird hazard guidelines. **Maintenance Material** Waste oils and fluids from maintenance activities may be classified under the POEO Act as being Hazardous, Industrial or Group A Waste. The management of these substances may need to be regulated by an EPA Environment Protection Licence which would be obtained by the terminal operator(s). It is expected that these materials would be collected and stored in proprietary facilities and either be reused onsite or removed by a licensed waste contractor. Scrap metal, used parts, components and machinery would be recycled where practicable.	**Operational Waste** A Waste Management Plan (WMP) has been developed and forms Appendix G to the OEMP. The WMP was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). Patrick has an Environmental Protection Licence (EPL 6962) for Chemical Storage. **Domestic Waste** Paper and cardboard are placed in the appropriate recycling bins and collected by Veolia Environmental Services. All domestic waste is collected on a regular basis and transported off site for disposal to a licensed landfill. **Maintenance Material** Waste oil and fluids collected in the plant wash-down area in the Maintenance Workshop are removed– oily rags, waste oil and fluids are pumped out from the collection units as required and transported by Cleanaway to an appropriate licenced liquid waste treatment facility, and recycled were possible. Scrap metal, used parts, components and machinery are recycled where practicable. **Hazardous Waste Transport** Hazardous waste is removed from site using licensed contractors with the applicable waste transport certificates maintained. Environmental inspections are routinely carried out at least on a quarterly basis, waste storage areas are part of the inspection. The volume and type of waste generated and removed from the site is recorded in the terminal's Waste Register.	**Predicted**

<table>
<tr><th>Section</th><th>PBE Environment Impact Statement - Prediction / Conclusion</th><th>Environmental Impact Assessment / Evidence</th><th>Assessment Rating</th></tr>
<tr><td colspan="4">Chapter 35 - Energy</td></tr>
<tr><td>35.3</td><td colspan="3">Operational Phase</td></tr>
<tr><td></td><td>The estimated annual energy consumption over the operational life of the project is presented in Table 35.2:
<table>
<tr><th></th><th>2010</th><th>2015</th><th>2020</th><th>2025</th></tr>
<tr><td>Projected Throughput (TEUs)</td><td>320,000</td><td>800,000</td><td>1,000,000</td><td>1,200,000</td></tr>
<tr><td>Estimated consumption of electricity (MWh)</td><td>10,000</td><td>17,000</td><td>21,000</td><td>25,000</td></tr>
<tr><td>Estimated consumption of diesel fuel (litres)</td><td>1,462,400</td><td>3,656,000</td><td>4,570,000</td><td>5,484,000</td></tr>
</table></td><td>For the period 1 July 2017 to 30 June 2018, the:
actual electricity consumption: 15,090 MW-hr
actual diesel fuel consumption: 4,561,894 L
actual gas fuel consumption: 6,186 L
Note: Auto Strads are slower and use more fuel than the manual straddles. They also take longer routes to move containers around the yard hence utilising more fuel due to greater engine hours.</td><td>Predicted</td></tr>
<tr><td>35.4</td><td colspan="3">Energy Conservation and Management</td></tr>
<tr><td></td><td>A key component of achieving energy conservation would be the development of an Energy Management Action Plan. This plan would be included as part of the Construction and Operational EMPs.</td><td>Energy Management Plan was included as part of the Construction EMP.</td><td>Predicted</td></tr>
<tr><td>35.4.2</td><td>Operational Phase
The following mitigation measures would be implemented during site operations and would be detailed in the Operational EMP to achieve energy efficiencies:
Energy Efficient Design
Energy Efficient Equipment
Energy Efficient Work Scheduling and Practice</td><td>Patrick has installed energy efficient systems in new buildings including low energy lighting, climate control air-conditioning with sensors in zones on each floor. External walls in the Tower/Administration and Maintenance Buildings are predominately fitted with large glass windows allowing additional light into the buildings (these glass windows are fitted with blinds and block-out blinds to control heat and light).

The Auto Strads are powered using diesel and electricity, and replaced manually operated straddles which were solely fuelled by diesel.</td><td>Predicted</td></tr>
</table>

Appendix D: Environment Protection and Biodiversity Conservation Act 1999

Table D: Assessment Predicted Ratings and Compliance with EPBC 2002/543

Term	Definition
EPBC	Environment Protection and Biodiversity Conservation Act 1999
Compliant	Complies with all requirements of the condition(s).
Observation	A situation observed during the audit that provides an opportunity for improvement or is not necessarily best practice or requires further consideration.
Non-Compliant	Does not fully comply with all requirements of the condition. These are categorised as minor or major, depending on the severity of the non-compliance.
Not Applicable	Not applicable

Table 19B: EPBC 2002/543, Annexure 1 (3 January 2006) Audit Checklist - Predictions and Conclusions

Annexure 1 Item	EPBC - Approval Requirement	Evidence	Assessment Rating
1	The person taking the action must construct the port expansion involving the creation of the four additional shipping berths, the provision of road, rail and terminal infrastructure and the enhancement of public and ecologically significant areas, in accordance with the site plan shown at ANNEXURE 2 of this approval.	NSW Ports received a letter (4 February 2016) from the DPE stating the Post-Construction Completion Compliance Report for the Knuckle and Ramp D (dated 15 December 2015) was satisfactory.	**Compliant**
2	Prior to the commencement of construction, the person taking the action must inform the Minister how radar and air navigation issues associated with the port expansion has have been resolved to the satisfaction of Airservices Australia.	Not relevant to Patrick's operations. Sydney Port Corporation (SPC) Audit Reports indicate that SPC received information from Department of Environment, Water, Heritage and the Arts (DEWHA – dated 2 July 2007) that this condition has been satisfactorily addressed.	**Compliant**

Annexure 1 Item	EPBC - Approval Requirement	Evidence	Assessment Rating
3	The person taking the action must be prepare and submit for the Minister's approval a habitat enhancement plan for Penrhyn Estuary to manage impacts on listed migratory bird species during the construction and operation of the new port facilities at Port Botany. The plan must address the matters listed below and state the environmental objectives, performance criteria, monitoring, reporting, corrective action, responsibility and timing for each of these matters: a) A detailed description of habitat enhancement works including methodology and staging of works; b) Habitat management and maintenance measures; c) A habitat monitoring programme; d) Measures to detect and respond to issues identified in the habitat monitoring programme; and e) Reporting requirements that include protocols to inform the Minister of relevant issues, milestones, and the results of surveys and studies. The action must not commence until the plan has been approved. The approved plan must be implemented.	Penrhyn Estuary Habitat Enhancement Plan (PEHEP), March 2007, was implemented by Sydney Ports Corporation prior to the construction of "the Knuckle" (Port Botany Expansion) at Patrick's Terminal. Ongoing monitoring and reporting in accordance with the PEHEP (March 2007) can be found on the Port Authority of New South Wales (formerly SPC) website: https://www.portauthoritynsw.com.au/sustainability-and-environment/penrhyn-estuary-rehabilitation/	**Compliant**
4	Should the person taking the action wish to amend or change the habitat enhancement plan approved under paragraph 3, a revised version of the plan must be submitted to the Minister for approval. If the Minister approves such a revised plan, the plan must be implemented in place of the plan as originally approved.	Not relevant to Patrick operations – no revisions have been made by NSW Ports to the initial PEHEP, the same revision is available (March 2007).	**Compliant**
5	If the Minister believes that it is necessary or desirable for the better protection of the environment to do so, the Minister may request the person taking the action to make specified revisions to a plan or plans approved pursuant to paragraphs 3 or 4, and to submit the revised plan for the Minister's approval. The person taking the action must comply with any such request. If the Minister approves a revised plan pursuant to this condition, the person taking the action must implement that plan instead of the plan as originally approved.	Patrick has not received any request from the Minister to make any revisions to the plans.	**Compliant**

Annexure 1 Item	EPBC - Approval Requirement	Evidence	Assessment Rating
6	The habitat enhancement plan required under paragraph 3 must be reviewed and resubmitted to the Minister for approval every five years or as otherwise agreed by the Minister. The resubmitted plan must incorporate the relevant results of the independent audit report required under paragraph 7.	Not relevant to Patrick operations – the PEHEP was implemented by SPC in March 2007 and is available on the Port Authority of New South Wales website at the time of this report. https://www.portauthoritynsw.com.au/sustainability-and-environment/penrhyn-estuary-rehabilitation/	Compliant
7	After construction of the new port facilities at Port Botany has been completed, and every five years thereafter or as otherwise agreed by the Minister, the person taking the action must ensure that an independent audit of compliance with the conditions of approval for the new port facilities at Port Botany, and the effectiveness of measures to mitigate impacts on listed migratory bird species, is carried out. The independent auditor must be accredited by the Quality Society of Australasia, or such other similar body as the Minister may notify in writing. The audit criteria must be agreed by the Minister within six months of the fifth anniversary of completion of construction of the new port facilities at Port Botany, and within 6-months of every 5th anniversary thereafter.	For compliance purposes Patrick's site was deemed operation as of 4 February 2016 and as such this condition will be required to be enacted every five years after construction i.e. 2020/2021.	Compliant
8	By 1 July of each year after the date of this approval or otherwise agreed by the Minister, the Chief Executive Officer of Sydney Ports Corporation must provide written certification that Sydney Ports Corporation has complied with the conditions of this approval.	Responsibility of NSW Ports | Port Authority NSW.	Not Applicable
9	If, at any time after 5 years from the date of this approval, the Minister notifies Sydney Ports Corporation in writing that the Minister is not satisfied that there has been substantial commencement of construction of the action, construction of the action must not thereafter be commenced.	Not relevant to Patrick's operations. The approval was issued to the then Sydney Port Corporation (SPC) on 3 January 2006 and construction of the Port Botany Expansion project commenced in May 2008 (i.e. within the 5-year time frame).	Not Applicable

Appendix E: Environmental Protection Licence – EPL 6962

Table E: EPL, Assessment Rating

Category	Definition
Compliant	Complies with all requirements of the condition.
Observation	Observed during the assessment which provides an opportunity or is not necessarily best practice or requires further consideration.
Non-Compliant	Does not fully comply with all requirements of the condition, categorised as 'Minor' or 'Major' depending on the severity.
Not Applicable	Either there are no compliance issues, was not applicable at the time of assessment, or is not the responsibility of Patrick.

Table 20B: EPL 6962 (date 13 June 2017)

<table>
<tr><th>Condition No.</th><th>EPL 6962 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>1</td><td colspan="3">Administrative Conditions</td></tr>
<tr><td>A1</td><td colspan="3">What the licence authorises and regulates</td></tr>
<tr><td>A1.1</td><td>This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation. Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.
<table>
<tr><th>Schedule Activity</th><th>Fee Based Activity</th><th>Scale</th></tr>
<tr><td>Chemical Storage</td><td>General chemicals storage</td><td>0-5000 kL storage capacity</td></tr>
<tr><td>Waste storage</td><td>Waste storage – hazardous, restricted solid, liquid, clinical and related waste and asbestos waste</td><td>Any listed waste type stored</td></tr>
<tr><td>Waste storage</td><td>Waste storage – other types of waste</td><td>Any other types of waste stored</td></tr>
</table></td><td>Noted</td><td>Compliant</td></tr>
<tr><td>A2.2</td><td>The licence applies to the following premises:
Patrick Port Botany Container Terminal, Penrhyn Road, Randwick NSW 2031
(LOT 202 DP 1183399, LOT 203 DP 1183399)</td><td>Noted</td><td>Compliant</td></tr>
</table>

Condition No.	EPL 6962 Conditions - Detail		Evidence	Assessment Rating
A3	**Other activities**			
A3.1	This licence applies to all other activities carried on at the premises, including: • Ancillary Activities: Shipping Facilities		Noted	**Compliant**
A4	**Information supplied to the EPA**			
A4.1	Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence. In this condition the reference to "the licence application" includes a reference to: a) the applications for any licences (including former pollution control approvals) which this licence replaces under the *Protection of the Environment Operations (Savings and Transitional) Regulation 1998*; and b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.		Noted	**Compliant**
2	**Discharges to Air and Water and Applicable Land**			
P1	**Location of monitoring / discharge points and areas**			
P1.1	The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.		Nil table provided in P1.1.	**Not Applicable**
3	**Limit Conditions**			
L1	**Pollution of waters**			
L1.1	Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the *Protection of the Environment Operations Act 1997.*	In 2018 there were 60 'environmental' related events, of which 10 were reported to regulatory agencies as it was uncertain at the time if they were going to eventuate into an incident. The remaining events were contained within the terminal area and cleaned up without any discharge to the environment and have been classified as 'near miss - environmental'. **Finding -** One of these was classified as a minor water pollution incident: On 9 September 2018, a minor leak occurred at Berth 7. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day. With the poor visibility of the water between the wharf and the vessel it was difficult to see if any of the oil had entered the waters of the dock. As a precaution, absorbent booms were placed into the waters, when removed there was some residual oil adhering to the absorbent material. The actual quantity was difficult to determine. A detailed report was sent to the EPA, NSW Ports and DPW on the 18 and 19 September 2018.		**Non-Compliant**

<table>
<tr><th>Condition No.</th><th>EPL 6962 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>L2</td><td colspan="3">Waste</td></tr>
<tr><td>L2.1</td><td>The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled “Waste” and meeting the definition, if any, in the column titled “Description” in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled “Activity” in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled “Other Limits” in the table below. This condition does not limit any other conditions in this licence.
<table>
<tr><th>Code</th><th>Waste</th><th>Description</th><th>Activity</th><th>Other Limits</th></tr>
<tr><td>NA</td><td>Any waste type over the threshold of Schedule 1 pf the POEO Act that is not otherwise listed in this table</td><td></td><td>Waste storage</td><td></td></tr>
<tr><td>NA</td><td>General or Specific exempted waste</td><td>Waste that meets all the conditions of a resource recovery exemption under Clause 92 of the Protection of the Environment Operations (Waste) Regulation 2014</td><td>As specified in each particular resource recovery exemption</td><td>NA</td></tr>
<tr><td>NA</td><td>Waste</td><td>Any waste received on site that is below licensing thresholds in Schedule 1 of the Protection of the Environment Operations Act 1997, as in force from time to time</td><td>-</td><td>NA</td></tr>
</table></td><td>Cargo received on the terminal, may include hazardous waste shipments which will be managed on a case by case basis.

In the event of waste being received - Patrick and the Owner of the waste (or their shipping agent) shall separately approach the Port Authority NSW and NSW Ports and seek approval for the storage and shipment of the designated waste.

When the shipping line has approval from the Port Authority NSW to use a specific vessel to carry the waste, and Patrick has approval to store the waste on the terminal and load the approved vessel. The Port Authority NSW shall liaise with the Police and FRNSW Hazmat to cover off any specific community related issues.

Once approvals have been received (via email), the shipping line / agent will work with Patrick to make arrangements for the waste to be received into the terminal and loaded onto the designated vessel within the agreed dwell times etc.</td><td>Complaint</td></tr>
</table>

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
L2.2	Waste must not be stored on the premises in quantities exceeding any licensing threshold under Schedule 1 of the *Protection of the Environment Operations Act 1997*, except for the purposes of transfer through the premises' shipping facilities.	Noted	Complaint
L2.3	If any waste in quantities above licensing thresholds listed under Schedule 1 of the *Protection of the Environment Operations Act 1997* is (a) predicted to be stored on the premises for more than 7 days, or (b) has been stored on the premises for more than 7 days; then The licensee mist provide a written notification to the EPA that includes the following information, where available: 1) the dangerous goods class and NSW waste classification of the waste that is the subject of the notification; 2) the total quantity of the waste; 3) details of why the waste has been or is predicted to be stored on the premises for more than 7 days; 4) details of when the waste is expected to be removed from the premises; and 5) how the environmental risks associated with storage of the waste will be managed by the licensee.	Noted	Compliant
L2.4	a) A notification for the purposes of complying with Condition L2.3 must be made within 48 hours of the licensee becoming aware of L2.3 (a) or (b). b) Notifications must be provided to the EPA via email at metro.regulation@epa,nsw.gov.au Note: The export, transit and import of hazardous wastes (as defined under the Hazardous Waste (Regulations of Exports and Imports) Act 1989) is subject to regulation by the Commonwealth Government. For further information, please see the Commonwealth Government's website at: https://www.environment.gov.au/protection/hazardous-waste	Noted	Compliant

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
3	**Limit Conditions**		
L3	**Noise Limits**		
L3.1	Noise from the premises must not exceed the noise limits presented in the Table below. Note the limits represent the noise contribution at the nominated receiver locations in the table.	Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics in May and November 2018. The noise emissions from Patrick have been estimated via calculation (worst case scenario is detailed below).	**Compliant**

Most affected residential Location	Day	Evening	Night	
	L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{Aeq}, 9hrs
Chelmsford Av	40	40	40	38
Dent St	45	43	43	43
Jennings St	36	36	36	35
Botany Rd (North of golf club)	47	43	43	45
Australia Av	35	35	35	35
Military Rd	42	42	42	40

L_{Aeq} = equivalent continuous (energy average) A-weighted sound pressure level

Location	Report Date	Day	Evening	Night	
		L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{Aeq} (15 min)	L_{Aeq} 9hrs
Chelmsford Av	**Limit**	**40**	**40**	**40**	**38**
	May 2018	59 Note 1	55 Note 1	51 Note 1	52 Note 1
	Nov 2018	60 Note 1	67 Note 1	63 Note 1	54.2 Note 1
Dent St	**Limit**	**45**	**43**	**43**	**43**
	May 2018	58 Note 1	48 Note 1	49 Note 1	51.9 Note 1
	Nov 2018	52 Note 1	53 Note 1	50 Note 1	51.9 Note 1
Jennings St	**Limit**	**45**	**43**	**43**	**43**
	May 2018	58 Note 1	51 Note 1	45 Note 1	50.6 Note 1
	Nov 2018	54 Note 1	56 Note 1	44	48.7 Note 1
Botany Rd (North of golf club)	**Limit**	**45**	**43**	**43**	**43**
	May 2018	63 Note 1	53 Note 1	56 Note 1	55.1 Note 1
	Nov 2018	63 Note 1	58 Note 1	55 Note 1	55.1 Note 1
Australia Av	**Limit**	**45**	**43**	**43**	**43**
	May 2018	57 Note 1	50 Note 1	47 Note 1	52.5 Note 1
	Nov 2018	54 Note 1	51	47	52.5 Note 1
Military Rd	**Limit**	**45**	**43**	**43**	**43**
	May 2018	61 Note 1	62 Note 1	55 Note 1	52.7 Note 1
	Nov 2018	56 Note 1	58 Note 1	65 Note 1	52.7 Note 1

Note 1 – Refer to L3.2, there is difficulty attributing the noise emissions detected in the community having singularly come from Patrick's operations.

<table>
<tr><th>Condition No.</th><th>EPL 6962 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>L3.2</td><td>Noise from the premises must not exceed the noise limits presented in the Table below. Note the limits represent the noise contribution at the nominated receiver locations in the table.
<table>
<tr><th>Most Affected Residential Location</th><th>Night
L_{A1} (1 minute)</th></tr>
<tr><td>Chelmsford Avenue</td><td>53</td></tr>
<tr><td>Dent Street</td><td>55</td></tr>
<tr><td>Jennings Street</td><td>55</td></tr>
<tr><td>Botany Road (North of golf club)</td><td>55</td></tr>
<tr><td>Australia Avenue</td><td>55</td></tr>
<tr><td>Military Road</td><td>55</td></tr>
</table>
L_{A1} = A-weighted sound pressure level exceeded for 1% of the time</td><td>The process for noise monitoring at the site is documented in the ONMP, which forms Appendix D to the OEMP.

Noise monitoring is conducted six-monthly by Rodney Stevens Acoustics. Monitoring conducted in May and November 2018 identified some levels above the limits in L3.2. The noise emissions received at the designated locations have been estimated via calculation (worst case scenario is detailed below).

Patrick did not report a recorded exceedance in the EPA Annual Return 1 April 2017 to 31 March 2018, based on an email (20 July 2016) received from the EPA advising that Patrick was not deemed non-compliant based on the difficulty of attributing the detected noise emissions in the community as having singularly come from Patrick's operations.
<table>
<tr><th>Location</th><th>Report Date</th><th>Night
L_{A1}</th></tr>
<tr><td>Chelmsford Av</td><td>Limit</td><td>53</td></tr>
<tr><td></td><td>May 2018</td><td>51.1</td></tr>
<tr><td></td><td>Nov 2018</td><td>58.1 Note 1</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td>Dent St</td><td>Limit</td><td>55</td></tr>
<tr><td></td><td>May 2018</td><td>55.2 Note 1</td></tr>
<tr><td></td><td>Nov 2018</td><td>52.9</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td>Jennings St</td><td>Limit</td><td>55</td></tr>
<tr><td></td><td>May 2018</td><td>51.7</td></tr>
<tr><td></td><td>Nov 2018</td><td>54.5</td></tr>
</table>
Table continues next page</td><td>Compliant</td></tr>
</table>

<table>
<tr><th>Condition No.</th><th>EPL 6962 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>L3.2</td><td></td><td>Table continued from previous page
<table>
<tr><th>Location</th><th>Report Date</th><th>Night
L_{A1}</th></tr>
<tr><td rowspan="3">Botany Rd
(North of golf club)</td><td>Limit</td><td>55</td></tr>
<tr><td>May 2018</td><td>56.8 Note 1</td></tr>
<tr><td>Nov 2018</td><td>54.9</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td rowspan="3">Australia Av</td><td>Limit</td><td>55</td></tr>
<tr><td>May 2018</td><td>56.4 Note 1</td></tr>
<tr><td>Nov 2018</td><td>53.3</td></tr>
<tr><td colspan="3"></td></tr>
<tr><td rowspan="3">Military Rd</td><td>Limit</td><td>55</td></tr>
<tr><td>May 2018</td><td>59 Note 1</td></tr>
<tr><td>Nov 2018</td><td>57.4 Note 1</td></tr>
</table>
Note 1 – Refer to L3.2, there is difficulty attributing the noise emissions detected in the community as having singularly come from Patrick's operations.</td><td>Compliant</td></tr>
<tr><td>L3.3</td><td>For the purposes of Conditions L3.1 and L3.2:
- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.
- Evening is defined as the period from 6pm to 10pm on any day.
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am Sundays and Public Holidays.</td><td>Periods for Day, Evening and Night are defined in noise monitoring reports and align with periods required by this licence condition.

Noise monitoring reports (May and November 2018) are provided to the NSW EPA. Copies of the reports are available on Patrick's website: http://www.patrick.com.au/environment-monitoring-reporting</td><td>Compliant</td></tr>
</table>

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
L3.4	For the purposes of Condition L3.1, noise from the premises must be measured or computed at the most affected point on or within the residential boundary.	Ambient noise monitoring is undertaken at the nearest potentially affected receivers in the vicinity of the site (i.e. Chelmsford Ave, Dent St, Jennings St, Botany Rd, Australia Ave, and Military Rd). Results from the unattended and attended noise monitoring are reported. Reference to this EPL condition is made in the 2018 bi-annual noise monitoring reports. Copies of the reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
L3.5	For the purposes of Condition L3.1, if a residential dwelling is located more than 30m from the residential boundary, noise from the premises must be measured or computed at the most affected point within 30m of the dwelling.	Reference to this EPL condition is made in the 2018 bi-annual noise monitoring reports. Copies of the reports are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
L3.6	Noise from the premises must be measured at 1m from the dwelling façade to determine compliance with the LA1 (1minute) noise limits at Condition L3.2.	Reference to this EPL condition is made in the 2018 bi-annual noise monitoring reports. A copy of the reports is available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
L3.7	The noise limits specified at Condition L3.1 and L3.2 apply under the following meteorological conditions: a) wind speeds up to 3 m/s at 10 metres above ground level; and b) temperature inversion conditions of up to 1.5 degrees C/100m.	Noise Monitoring Report for May 2018 and November 2018 take into account the meteorological conditions including '1.5 degrees' in accordance with EPL Condition L3.7.	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
4	**Operating Conditions**		
O1	**Activities must be carried out in a competent manner**		
O1.1	Licensed activities must be carried out in a competent manner. This includes: a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.	The terminal's Landside Manager is responsible for implementing *Standard Operating Procedure - Storage & Handling of Hazardous/Dangerous Goods (PBT_OPS_SOP_04_03_v4, 12 September 2017*). The Port Authority NSW conducts regular routine random inspections / audits. The process for collecting, storing and disposing of waste oil is: • There are 4 collection stations inside the workshop – 2x located in the North Bay and 2x located at the South Bay. • The waste oil is pumped to designated 2 x 5,000L storage tanks located in the North and South. • An agreement is in place with 3rd party contractors (e.g. Cleanaway) to collect used oil filters and waste oil fortnightly at nil cost (copy of Collection Advice sighted). Waste oil is recycled as an energy source. Note: used rags are no longer collected due to contamination of waste stream. • Volumes of waste oil are not recorded by Patrick (invoices are kept by Purchasing Manager). • Designated bins are located in the Maintenance workshop for used oil filters.	**Compliant**
O2	**Maintenance of plant and equipment**		
O2.1	All plant and equipment installed at the premises or used in connection with the licensed activity: a) must be maintained in a proper and efficient condition; and b) must be operated in a proper and efficient manner.	Maintenance operates a preventative maintenance program which is scheduled and carried out using Maximo for all plant and equipment. Environmental protection equipment (e.g. drain wardens) are included.	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
O3	**Dust**		
O3.1	The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.	A street sweeper is utilised on site at least monthly and more often if needed. The majority of the site is sealed with concrete and bitumen, reducing the likelihood of dust generation and emissions. Control measures for dust are included in the OEMP. Speed limits are set on the site to minimise the risk of dust generation within the Terminal.	**Compliant**
O4	**Processes and management**		
O4.1	The licensee must ensure that any liquid and/or non-liquid waste generated at the premises is assessed and classified in accordance with the EPA Waste Classification Guidelines as in force from time to time.	The process for waste classification and management is outlined in Table 2 and Section 3.4 of the Waste Management Plan (WMP), reviewed January 2015. Waste streams are identified in Section 3.3. A Waste Register Template is provided in Appendix A to the WMP. Patrick uses the tax invoice provided by the licensed contractor to identify waste type (classification) and quantity. Patrick receives a copy of the Waste Transport Certificate with the invoice. Dockets from Veolia and Cleanaway (licenced waste contractors) are maintained on site. Patrick to confirm location and appropriate licensing of waste receiving facilities and obtain licenses for waste transporters to keep on file. Waste classified as J120 (waste oil/water, hydrocarbons) is generated via the wastewater treatment process in the maintenance workshop.	**Compliant**
O4.2	The licensee must ensure that waste identified for recycling is stored separately from other waste.	Waste oil is recycled and stored separately from other waste in the maintenance department. A recycling program for paper/cardboard is in place at the terminal.	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
5	**Monitoring and Recording Conditions**		
M1	**Monitoring records**		
M1.1	The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.	Noise monitoring is the only monitoring required by the applicable EPL (13 June 2017). Compliance with noise monitoring has been addressed in Conditions L3.1 to L3.7 above.	**Compliant**
M1.2	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them.	Monitoring records are maintained in report format provided by Rodney Stevens Acoustics. Noise monitoring reports are available on Patrick's website - http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
M1.3	The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Noise monitoring data is recorded by Rodney Stevens Acoustics. Noise Monitoring reports comply with this condition.	**Compliant**
M2	**Recording of pollution complaints**		
M2.1	The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.	The process for managing noise complaints is documented in the Patrick ONMP. A Register for recording of complaints / feedback from the community has been included in this AEMR (2018), refer to Section 7 of this report (Public Comments, Inquiries & Complaints Register). The complaints handling process is outlined in Table 4 of the OEMP. A community feedback (complaints) report is issued each quarter and available on the Patrick's website - http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
M2	**Recording of pollution complaints** *(Continued)*		
M2.2	The record must include details of the following: a) the date and time of the complaint; b) the method by which the complaint was made; c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect; d) the nature of the complaint; e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and f) if no action was taken by the licensee, the reasons why no action was taken.	As per M2.1 above.	**Compliant**
M2.3	The record of a complaint must be kept for at least 4 years after the complaint was made.	OEMP, Appendix P – Complaints Management Process details the retention period for complaint records.	**Compliant**
M2.4	The record must be produced to any authorised officer of the EPA who asks to see them.	A community feedback (complaints) report is issued each quarter and available on the Patrick's website - http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**
M3	**Telephone complaints line**		
M3.1	The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.	Patrick has a designated telephone number for reporting complaints i.e. (02) 9394 0308 which is diverted to a mobile phone ensuring 24/7 cover.	**Compliant**
M3.2	The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.	As per M3.1 above.	**Compliant**
M3.3	The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.	Noted	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
6	**Reporting Conditions**		
R1	**Annual returns documents**		
R1.1	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance – Licence Conditions, 4. a Statement of Compliance – Load based Fee, 5. a Statement of Compliance – Requirement to Prepare Pollution Incident Response Management Plan 6. a Statement of Compliance – Requirement to Publish Pollution Monitoring Data; and 7. a Statement of Compliance – Environmental Management Systems and Practices. At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.	Annual Return documents are prepared and submitted to the EPA by the Patrick. Annual Returns include a Statement of Compliance and a Monitoring and Complaints Summary, as required by this condition (Ref: Annual Returns 2005/2006 to present).	**Compliant**
R1.2	An Annual Return must be prepared in respect of each reporting period, except as provided below.	The Annual Return for the period 1 April 2017 to 31 May 2018 was received by the EPA on 24 May 2018 i.e. within the timeframe specified by this condition.	**Compliant**
R1.3	Where this licence is transferred from the licensee to a new licensee: a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.	Patrick continues to be the EPA Licensee. While the signatories have changed over time this does not affect compliance with this condition.	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
R1.4	Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on: a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.	Noted	Compliant
R1.5	The Annual Return for the reporting period must be supplied to the EPA via *e*Connect *EPA* or by registered post no later than 60 days after the end of each reporting period or in the case of a transferring licence no later than 60 days after the date the transfer was granted (the 'due date').	Patrick lodged the 2017/18 Annual Return via eConnect EPA on the 24 May 2018, within the 60 days reporting period.	Compliant
R1.6	The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.	Patrick completes Annual Returns for the site and records dating from 2005/2006 are available on the company drive.	Compliant
R1.7	Within the Annual Return, the Statement of Compliance must be certified and the Monitoring and Complaints Summary must be signed by: a) the licence holder; or b) by a person approved in writing by the EPA to sign on behalf of the licence holder. Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period. Note: An application to transfer a licence must be made in the approved form for this purpose.	The Statement of Compliance was certified, and the Monitoring and Complaints Summary signed by the licence holder in the Annual Return for FY17/18 and reporting period 1 April 2017 to 31 May 2018.	Compliant
R2	**Notification of environmental harm**		
R2.1	Notifications must be made by telephoning the Environment Line service on 131 555.	Notifications to the EPA are made using the Environment Line service on 131 555.	Compliant

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
R2	**Notification of environmental harm** *(Continued)*		
R2.2	The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred. Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.	OEMP Table 4 also sets out reporting requirements. The Emergency Response Plan (ERP) is available as part of OEMP on Patrick's website: http://www.patrick.com.au/environment-management The terminal's escalation matrix (revised 17 May 2018) has been updated to include the notification and reporting process the frontline managers are to follow i.e. notify regulators of actual or potential environmental incidents / near misses with the potential to impact people and/or the environment. In 2018 there were 60 'environmental' related events, of which 10 were reported to the EPA and DPE, and NSW Ports as it was uncertain at the time if they were going to eventuate into an incident. The remaining events were contained within the terminal area and cleaned up without any discharge to the environment and have been classified as 'near miss - environmental'. On the 9 September 2018, a minor leak occurred at Berth 7. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day.	**Compliant**
R3	**Written report**		
R3.1	Where an authorised officer of the EPA suspects on reasonable grounds that: a) where this licence applies to premises, an event has occurred at the premises; or b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence, and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.	Written reports have been provided to the NSW EPA either by Patrick or on request. On the 9 September 2018, a minor leak occurred at Berth 7. Patrick self-reported the incident to the EPA's Pollution Incident Call Line (C12449-2018) on the same day. A detailed report was sent to the EPA, NSW Ports and DPW on the 18 and 19 September 2018.	**Compliant**

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
R3.2	The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.	As per condition R3.1 above.	**Compliant**
R3.3	The request may require a report which includes any or all of the following information: a) the cause, time and duration of the event; b) the type, volume and concentration of every pollutant discharged as a result of the event; c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event; d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort; e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants; f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and g) any other relevant matters.	As per condition R3.1 above.	**Compliant**
R3.4	The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.	As per condition R3.1 above.	**Compliant**
7	**General Conditions**		
G1	**Copy of licence kept at the premises or plant**		
G1.1	A copy of this licence must be kept at the premises to which the licence applies.	A copy of EPL 6962 is available on the Patrick's intranet page and website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

<table>
<tr><th>Condition No.</th><th>EPL 6962 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>G1.2</td><td>The licence must be produced to any authorised officer of the EPA who asks to see it.</td><td>The licence is available on site as per Condition G1.1 above.</td><td>Compliant</td></tr>
<tr><td>G1.3</td><td>The licence must be available for inspection by any employee or agent of the licensee working at the premises.</td><td>As per condition G1.1 above.</td><td>Compliant</td></tr>
<tr><td>G2</td><td colspan="3">Other general conditions</td></tr>
<tr><td>G2.1</td><td>Completed Pollution Studies and Reduction Programs (PRPs)
<table>
<tr><th>PRP</th><th>Description</th><th>Completed Date</th></tr>
<tr><td>Submit detailed report proposing options and a pre</td><td>Submit to the EPA a detailed report proposing options and a preferred option to prevent pollution of waters from activities undertaken on the site.</td><td>15-Oct-01</td></tr>
<tr><td>Stormwater Risk Assessment</td><td>To identify any potential risks to stormwater or local marine receiving environments posed by operation of the premises and provide recommendations for addressing any such identified risks.</td><td>01-Apr-13</td></tr>
<tr><td>Stormwater Improvement Action Plan</td><td>Prepare a plan detailing the actions and timeframes that will be undertaken by the licensee to improve the quality of stormwater discharges to meet licence conditions.</td><td>23-May-13</td></tr>
<tr><td>Stormwater Improvement</td><td>Provide a report outlining the stormwater improvements undertaken by the licensee.</td><td>31-Dec-13</td></tr>
</table></td><td>The Pollution Studies and Reduction Programs listed in this licence condition relate to historic studies and programs which have been completed (e.g. wastewater treatment plant treating water from the maintenance forecourt, which has since been covered).

Details of the studies and programs have been previously submitted to the EPA.</td><td>Compliant</td></tr>
</table>

Condition No.	EPL 6962 Conditions - Detail	Evidence	Assessment Rating
8	**Special Conditions**		
E1	**Noise Monitoring and Compliance Reporting**		
E1.1	The licensee must undertake noise monitoring as follows: a) The noise monitoring must be undertaken within 6 months of the commencement of operations on the new extension - Lot 202, DP 1183399; and b) The noise monitoring must verify the assumptions and the noise limits as outlined in the Port Botany Container Terminal Expansion Noise Assessment (2003), part of the Environment Impact Assessment submitted in accordance with the Environmental Planning and Assessment Act 1979 for the approved container terminal development.	Noise Monitoring Reports (Rodney Stevens Acoustics) reference EPL Condition E1 (Page 6). Conditions E1.1 and E1.2 are also referenced in the noise monitoring report (Section 3 EPL (Noise)). The Port Botany Container Terminal Expansion Noise Assessment (2003) is also referenced in the Noise Monitoring Reports.	**Compliant**
E1.2	Every 6 months after the commencement of operations of the new extension - Lot 202, DP 1183399, the Licensee must undertake a periodic noise monitoring program consisting of the attended and unattended monitoring and provide a report within one month after the completion of the monitoring to the EPA's Manager, Sydney Industry at PO Box 668 Parramatta NSW 2124 containing the following information: a) Unattended monitoring data for a continuous period of no less than two weeks; b) Attended monitoring data during the period outlined in subsection (a); c) Monitoring data from locations specified in Conditions L3.1 and L3.2; d) An assessment of the noise levels against Condition L3 including trend analysis; and e) Details of any feasible and reasonable noise mitigation measures that have been or are proposed to be implemented further reduce noise levels below the limits prescribed in this licence.	Noise monitoring reports (May and November 2018) were provided to the NSW EPA and are available on the Patrick website: http://www.patrick.com.au/environment-monitoring-reporting	**Compliant**

Appendix F: Consent to Discharge Industrial Trade Wastewater – No. 24990

Table F: Trade Wastewater Consent, Assessment Rating

Category	Definition
Compliant	Complies with all requirements of the condition.
Observation	Observed during the assessment which provides an opportunity or is not necessarily best practice or requires further consideration.
Non-Compliant	Does not fully comply with all requirements of the condition, categorised as 'Minor' or 'Major' depending on the severity.
Not Applicable	Either there are no compliance issues, was not applicable at the time of assessment, or is not the responsibility of Patrick.

Table 22B: Trade Waste Consent No. 24990 (Issued 24 June 2015)

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	SCHEDULE 1 - Trade Wastewater which May be Discharged		
1	**Trade wastewater substances**		
	(a) The Customer may discharge trade wastewater into the sewer in a manner whereby the substance characteristics of the trade wastewater are of a type and discharged at a rate, level or concentration equal to or less than that described in this schedule. (b) The Customer must not discharge trade wastewater into the Sewer in a manner whereby the trade wastewater discharged; i. contains, possesses or produces a substance characteristic not provided in, or which may be determined as being contrary to that described in this schedule. ii. is at or of a rate, level, or concentration not provided in, or which may be determined as being contrary to, that described in this schedule. • BOD: LTADM: 15kg/day, MDM: 27kg/day (Standard: -) • Suspended Solids: LTADM: 1.4kg/day, MDM: 4.8kg/day (Standard: 600kg/day) • Grease: LTADM: 0.8kg/day, MDM: 3.5kg/day (Standard: 110kg/day) • Volatile Halocarbons: LTADM: 0.00265kg/day, MDM: 0.014kg/day (Standard: 1kg/day) • Petroleum Hydrocarbons (Flammable C6-C9): (Standard: 10kg/day)	Patrick Stormwater (s.4) and Waste Management Plans (s3.4.1, 4.3) include procedures for the management of trade waste at the site. Chain of Custody (CoC) records from Eurofins are available. Samples were submitted for the analysis of the parameters required by the consent. Laboratory Certificates of Analysis area also available for review.	Compliant

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	RECONCILIATION PROCEDURES: **LONG TERM AVERAGE DAILY MASS:** The Long Term Average Daily Mass is a 12 month arithmetic average of ALL daily mass discharges as calculated for each composite sample. The Daily Mass discharges is to be calculated for each of the above substances and checked against the Long Term Average Daily Mass (kg/day) on the basis of average concentrations of substances discharges (mg/L) over any 24 hour period as determined from composite samples, obtained by either the Customer (in accordance with Schedule 2) or Sydney Water, or a combination of sample results by both. This average concentration (mg/L) is to be multiplied by the total discharge (kL) as recorded by the Customer's discharge flow meter over the 24 hour period in order to calculate the Daily Mass of substances discharged (kg). Exceeding the Long Term Average Daily Mass does not constitute a Breach.	Eurofins ((Environmental Testing Australia Pty Ltd) reports the monitoring results directly to Sydney Water who calculates the rate of waste discharged which is then used by Sydney Water for billing purposes.	**Compliant**
	ACCEPTANCE STANDARD: The Composite Sample Concentration is to be determined for each of the above substances and checked against the above Acceptance Standard (mg/L) for each sample obtained. Exceeding the Acceptance Standard constitutes a breach and will also incur an increased Quality Charge as detailed in Schedule 3. The Discrete Sample Concentration is to be determined for each of the substances identified at Schedule 2, 2(b) and checked against the above Acceptance Standard (mg/L) for each sample obtained. Exceeding the Acceptance Standard constitutes a Breach.	Conducted by the Eurofins (approved by Sydney Water, engaged by Patrick to manage trade waste sampling, collection and testing etc) e.g. laboratory reports.	**Compliant**
	MAXIMIM DAILY MASS: The Daily Mass discharged is to be calculated for each of the above substances and checked against the above Maximum Daily Mass (kg/day) on the basis of average concentrations of substances discharged (mg/L) over any 24 hour period as determined from composite samples, obtained by either the Customer (in accordance with Schedule 2) or Sydney Water, or a combination of sample results by both. This average concentration (mg/L) is to be multiplied by the total discharge (kL) as recorded by the Customer's discharge flow meter over the 24 hour period in order to calculate the Daily Mass of substances discharged (kg). Exceeding the Maximum Daily Mass constitutes a Breach.	Eurofins reports the monitoring results directly to Sydney Water who calculates the rate of waste discharged which is then used by Sydney Water for billing purposes.	**Compliant**

<table>
<tr><th>No.</th><th>TW Consent 24990 Conditions - Detail</th><th>Evidence</th><th>Assessment Rating</th></tr>
<tr><td>2</td><td colspan="3">The trade wastewater discharge must at all times have the following properties</td></tr>
<tr><td></td><td><table>
<tr><td>Temperature:</td><td>Not to exceed 38 degrees Celsius</td></tr>
<tr><td>Colour:</td><td>Determined on a system specific basis</td></tr>
<tr><td>pH:</td><td>Within the range 7.0 -10.0</td></tr>
<tr><td>Fibrous material:</td><td>None which could cause an obstruction to Sydney Water’s sewerage system</td></tr>
<tr><td>Gross solids (other than faecal):</td><td>A maximum linear dimension of less than 20mm, a maximum cross section dimension of 6mm and a quiescent settling velocity of less than 3m/h</td></tr>
<tr><td>Flammability:</td><td>Where flammable and/or explosive substances may be present, Patrick must demonstrate that there is no possibility of explosions or fires occurring in the sewerage system, to the satisfaction of Sydney Water. The flammability of the discharge must never exceed 5% of the Lower Explosive Limit (LEL) at 25 degrees Celsius.</td></tr>
</table></td><td>Conducted by Eurofins (approved by Sydney Water, engaged by Patrick to manage trade waste sampling, collection and testing etc) e.g. laboratory reports.</td><td>Compliant</td></tr>
<tr><td>3</td><td colspan="3">Rate of discharge of waste to sewer:</td></tr>
<tr><td></td><td>(a) Instantaneous maximum rate of gravitated discharge 1.00 litres per second
(b) Maximum daily discharge 50.0 kilolitres
(c) Average daily discharge 23.0 kilolitres</td><td>Noted</td><td>Compliant</td></tr>
<tr><td></td><td>RECONCILIATION PROCEDURE:
The data obtained by following the above procedures relating to trade wastewater is to be checked by the interface of a chart recorder to the flow metering equipment or by the installation of flow metering equipment by Sydney Water for a minimum of 7 days.</td><td>Noted</td><td>Compliant</td></tr>
<tr><td></td><td colspan="3">SCHEDULE 2 – Sampling, Analysis, Flow Rates and Volume Determination</td></tr>
<tr><td>1</td><td colspan="3">The Customer must provide and make available for the purpose of sampling and analysis:</td></tr>
<tr><td></td><td>(a) Sampling point located at gauging pit/tank, incl. domestic sewage prior to the point of connection to the Sewer.
(b) Equipment necessary to allow collection of composite automatic samples on either a flow proportional or time basis.</td><td>Location of sampling point and automatic sampler as specified by Sydney Water.</td><td>Compliant</td></tr>
</table>

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	SCHEDULE 2 – Sampling, Analysis, Flow Rates and Volume Determination		
2	**The Customer is to undertake collection and analysis of samples in accordance with the schedule detailed below:**		
	(a) Composite samples are to be obtained: i. over one full production day by combining equal volumes taken at 1 kL intervals. The volumes are to be such that at least 5,000mL are obtained over the full day. The reading of the Flowmeter is to be obtained at the commencement and conclusion of the sampling day. ii. On 27 August 2015 and every 60 days thereafter, if trade wastewater is not discharged on this day, then the sample is to be taken on the next day that trade wastewater is discharged. Trade wastewater includes all non-domestic wastewater discharged to sewer from the premises, including cleaning waste.	Eurofins obtains and collects the composite samples on behalf of Patrick and arranges laboratory testing.	**Compliant**
	(b) Discrete samples are to be obtained as detailed below, and analysed according to the procedures and methods specified in Sydney Water's published analytical methods, to determine the concentrations or levels of the following substance characteristics: • pH: at the start and finish of each sample day • Petroleum Hydrocarbons (Flammable C6-C9): at the finish of each sample day • Volatile Hydrocarbons: at the finish of each sample day	Eurofins obtains discrete samples on behalf of Patrick and arranges laboratory testing.	**Compliant**
	(c) Composite samples are to be analysed according to the procedures and methods specified in Sydney Water's published analytical methods, or methods otherwise agreed to and detailed hereunder, to determine the concentration or levels of the following substance characteristics: • Biological Oxygen Demand (BOD) • Suspended Solids (SS) • Grease • Volatile Hydrocarbons.	Eurofins obtains discrete samples on behalf of Patrick and arranges laboratory testing.	**Compliant**
	(d) The Customer, or the laboratory contracted by the customer, is to submit results of analyses to Sydney Water within 21 days from the date the sample was taken. All analysis results are to be submitted on the sample analysis report provided as appendices 1 and 2 to this Consent OR in such format as may be specified from time to time by Sydney Water.	Eurofins sends a copy of the results directly to Sydney Water, and Patrick.	**Compliant**

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	(e) All data requested on the sample analysis report must be provided.	Eurofins monitoring results report includes data requested by Sydney Water's Trade Waste Consent.	Compliant
	(f) Sydney Water must be notified in writing within 7 days of: i. any failure to obtain samples in accordance with the provisions of Schedule 2; or ii. any loss of any analytical data. Where data is unavailable, lost or not provided, the Quality Charge, as detailed in Schedule 3, will be assessed on the basis of the highest Composite Sample concentration recorded in the 12 months prior to the date of the missing sample data.	Eurofins reports directly to Sydney Water any failure to obtain samples or loss of any analytical data.	Compliant
3	**Volume of Wastewater Discharged, Flow Metering System**		
	The volume of wastewater discharged must be obtained from the reading of the total flow on the Customer's flow metering system. The rate of waste discharged is to be obtained by the reading of the instantaneous flow rate indicator on the Customer's flow metering system, or from any chart recorder interfaced to the Customer's flow metering system.	Eurofins reports the sampling details and monitoring results directly to Sydney Water who calculates the rate of waste discharged which is then used by Sydney Water for billing purposes.	Compliant
	The flow metering system is to be calibrated at least annually at the Customer's expense, by a person or company approved by Sydney Water and a copy of the calibration certificates supplied to Sydney Water within one month of such certificate being received by the Customer.	The flow meter system is scheduled for annual calibration in the Engineering & Maintenance scheduling system, Maximo.	Compliant
	If the Customer's flow metering system fails to record data for any period, Sydney Water is to be advised in writing by the Customer within 7 days of any such failure becoming known by the Customer. An estimate of any data not recorded is to be made as follows: Average of the waste discharges, registered for the four weeks before and/or after the failure to record.	In the instance equipment fails, Patrick will report (within 7 days) the failure to Sydney Water and arrangements are made for additional sampling as required.	Compliant
	SCHEDULE 3 - Payments		
	Nil conditions	Noted	Compliant

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	SCHEDULE 4 – Additional Requirements		
1	**Effluent Improvement Program**		
	N/A	Noted	Not Applicable
2	**Waste Management Program**		
	The existing pre-treatment will result in the generation of 42.0 tonne per annum of waste substances in the form of a sludge containing generally solids. The waste substances are, and will continue to be disposed of, in compliance with the requirements of the EPA.	A Waste Management Plan (WMP) has been developed and forms Appendix G of the OEMP and was approved by the Secretary (prior to October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The WMP is located on Patrick's website: http://www.patrick.com.au/environment-management Patrick engages licensed waste transport providers to remove any hazardous waste generated at the site (e.g. Maintenance Department) and disposed of at appropriately licensed facilities.	Compliant
3	**Waste Management Program**		
3.1	Backflow Containment Device must be installed and maintained at the water meter outlet property boundary in line with Sydney Water's Connected Customer Policy.	A Backflow Protection (a sealed unit) Device is in place and tested annually by Matic Plumbing (approved by Sydney Water) and the results forwarded directly to Sydney Water. The most recent test was completed 3 July 2018.	Compliant
3.2	Backflow individual/zone protection is required on any tap located within 5m of the trade waste apparatus.	No water taps are located within 5 m of the trade waste system.	Compliant
	SCHEDULE 5 – Apparatus, Plant and Equipment		
1	**Existing**		
	1 x Danfos Magflo Meter 1 x 1,000L Batch Tank 1 x 1,000L Line Transfer Tank 1 x 40L Caustic Tank with Low Level Alarm 1 x Auto Batch 500 with Indexing Belt and Filter Paper Roll 1 x 200,000L Holding Tank with Pumps	The apparatus, plant and equipment listed is present and operational.	Compliant

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	SCHEDULE 6 – Special Conditions		
	Proposed		
	N/A		Not Applicable
1	**Dangerous Discharges**		
	In this Schedule, the term 'may pose a danger to the environment, the Sewer or workers at a sewage treatment plant': (a) means an occurrence whereby matter is discharged to the Sewer which either alone or in conjunction with other matter discharged cannot be adequately treated or may cause corrosion or a lockage, explosion or the production of dangerous gases in the Sewer or may adversely affect the operation of a sewer or sewage treatment plant; and (b) includes, but not so as to restrict the generality of paragraph (a), matter or substances, which is or are: i. toxic or corrosive; ii. petroleum hydrocarbons; iii. heavy metals; iv. volatile solvents; v. phenolic compounds; vi. organic compounds.	A Waste Management Plan (WMP) has been developed and forms Appendix G of the Operational EMP and was approved by the Secretary (prior to 24 October 2017 was known as Director-General) on 25 March 2015 (refer to letter from Ms Karen Jones (DPE) to Mr Paul Jerogin (Lend Lease)). The WMP is located on Patrick's website: http://www.patrick.com.au/environment-management Patrick engages licensed waste transport providers to remove any hazardous waste generated at the site (e.g. Maintenance department) and disposed of at appropriately licensed facilities.	**Compliant**
2	**Unintended Discharges**		
	(a) For purposes of avoiding unintended discharges to the Sewer or the stormwater drainage system, all matter and substances on the Premises must be processed, handled, moved and stored in a proper and efficient manner.	Spill kits are readily available with absorbent material to reduce the risk of entering sewer or the stormwater drainage system. Drain wardens are located in key stormwater drains so that in an event of a spill/leak they can be turned from open to closed.	**Compliant**
	(b) Any substance on the Premises which, if discharged to the Sewer, may pose a danger to the environment, the Sewer or workers at a STP or may harm any sewage treatment process must be handled, moved and stored in areas where leaks, spillages or overflows cannot drain by gravity or by automated or other mechanical means to the Sewer or the stormwater drainage system.	Fuel and chemical storage is stored in bunded areas. Any potential spills or leaks have limited potential to enter the sewer or the stormwater drainage system. Spill kits are readily available with absorbent material to reduce the risk of entering sewer or the stormwater drainage system. Drain wardens are located in key stormwater drains so that in an event of a spill/leak they can be turned from open to closed.	**Compliant**

No.	TW Consent 24990 Conditions - Detail	Evidence	Assessment Rating
	SCHEDULE 6 – Special Conditions		
3	**Notification**		
	In the event of a discharge of matter to the sewer that poses or may pose a danger to the environment, the sewer workers at a STP the Customer must immediately notify: (a) Malabar STP Control Room TEL: (02) 9931 8319 FAX: (02) 9931 8366 (b) Business Customer Services (8am to 5pm Mon to Fri) TEL: 1300 985 227 (c) Business Customer Services Emergency Contact (24 Hours) TEL: (02) 8849 5029	Noted	**Compliant**
4	**Provision of Safe Access**		
	The Customer shall provide safe access to Sydney Water employees visiting the site. In the event that unsafe conditions are identified the Customer must take reasonable steps to correct unsafe conditions and create safe access.	Visitors to site are signed in at Patrick's Security Office located at Gate B105) and while on the terminal escorted by a Patrick employee unless the visitor is already inducted. Before any inspections / sampling is carried out the work area is inspected, any hazards identified are controlled and if required, work permits issued.	**Compliant**
5	**Electronic Reporting of Sample Analysis Results**		
	Sydney Water reserves the right to vary this consent to specify the option of reporting by electronic mail as outlined in Schedule 2, 2 (d)).	Noted	**Compliant**
	SCHEDULE 7 (Location Details)		
	Nil conditions	Noted	**Not Applicable**
	SCHEDULE 8 – Notices and Communication Addresses		
	Nil conditions	Noted	**Not Applicable**
	SCHEDULE 9 – Authorised Officers		
	Nil conditions	Noted	**Not Applicable**
	SCHEDULE 10 – Nominated Representatives		
	Nil conditions	Noted	**Not Applicable**

Appendix G: Management of Key Performance Areas

Table G: Key Performance Areas, Indicators, Goals and Results: 1 January 2017 to 31 December 2018

Key Performance Area	Key Performance Indicator	KPI Goals	2018 Results (1-Jan-18 to 31-Dec-18)
Air Quality	Dust and odour complaints expressed as the number of community complaints per 100,000 TEU	Zero per 100,000 TEU	0
Aviation Operational Impacts	Airport-related complaints including light-spill, radar interference; expressed as the number of **aviation complaints per 100,000 TEU**	Zero per 100,000 TEU	0
	The number of times problem birds need to be actively managed at the Patrick's terminal, expressed as the number of **bird hazard management events per 100,000 TEU**	Zero per 100,000 TEU	0
Noise and Complaints	Noise disturbances expressed as the number of **community complaints or exceedances of the noise limits specified in Development Consent Condition C 2.6 during monitoring per 100,000 TEU**	Zero per 100,000 TEU	0
Operational Traffic	Traffic noise disturbance and traffic impacts such as congestion or trucks parking in residential streets, expressed as the number of **traffic-related community complaints per 100,000 TEU**	Zero per 100,000 TEU	0
Water Quality	Number of times the Pollutant Concentration Limit is exceeded, expressed as **pollution events per 100,000 TEU**	Zero per 100,000 TEU	0
Dangerous Goods and Hazardous Substances Cargo Management	Number of liquid spills or gas leaks during the handling of dangerous goods and hazardous substances, expressed as the **number of incidents per 100,000 TEU**	Zero per 100,000 TEU	1 incident **9 September 2018** - A minor water pollution incident on was reported to the EPA and DPE
	Number of exceedances of the DG throughput limits specified in Development Consent DA 494 MOD 16, condition C 2.17 per 100,000 TEU (i.e. Berth 6)	Zero per 100,000 TEU	0

Key Performance Area	Key Performance Indicator	KPI Goals	2018 Results (1 Jul-17 to 30-Jun-18)
Waste Generation	Amount of solid waste generated and the amount of waste recycled expressed as **cubic metres of solid waste generated per TEU*** and **cubic metres of solid waste recycled per TEU***	TBA	**Solid Waste =** Estimate 500 m^3 0.0007 m^3 recycled / TEU
	Amount of liquid waste generated and the amount of liquid waste recycled expressed as **litres of liquid waste generated per TEU*** and **litres of liquid waste recycled per TEU***	TBA	**Total Liquid Waste =** Estimate Total liquid waste 351,400 L, 0.5 L / TEU Estimate Liquid waste recycled 40100 L, 0.06 L recycled / TEU
Native and feral animal management	The **number of shorebird management events per 100,000 TEU**	Zero per 100,000 TEU	0
	The **number of feral animal management events per 100,000 TEU**	Zero per 100,000 TEU	0
Water	**The amount of potable water** (including potable water supplied to other businesses) used per TEU, expressed in **kilolitres per TEU***	TBA	**Total water used =** Estimate 65,000 kL, 0.09 kL / TEU
Energy	Fuel consumption expressed in **litres per TEU***	TBA	**Total fuel =** Estimate 4,561,894 L, 6.73 L / TEU
	Electricity Consumption expressed in **kilowatt hours per TEU***	TBA	**Total electricity consumption =** Estimate 15,089,000 KWh, 22.3 KWh / TEU
	Carbon emissions expressed in **kilograms of CO_2 emitted per TEU***	TBA	**Total carbon emissions =** Estimate 13,000,000 kg CO_2-e, 19.1 kg CO_2-e / TEU

* Preliminary KPI goals, additional operational data required to set goals.

Appendix H: Dangerous Goods Movements through Berth 6

Table H: DA 494, C2.17 - Dangerous Goods, Unit Size and Number of Movements at Berth 6 (The Knuckle): 1 September 2017 to 31 August 2018

DG Class	DG Class Description	Basis – Unit Type and shipping containers thru Patrick Port Botany Expansion [Note 1] per year containing DG Class				Comments ex DA-494-11-2003-I MOD16, condition C2.17
		From 2te up to 12 te NEQ [Note 2]		Greater than or equal to 12te NEO [Note 2]		
		Limit	Actual (Berth 6)	Limit	Actual (Berth 6)	
1	Total Class 1.1 and 1.2	83	0	63	0	Numbers as per PHA (rev 7) Table 6.8
		NOTE – BELOW ARE DIFFERENT SIZES TO THOSE LISTED ABOVE				
		Containers of packaged material		Tank-tainers (Bulk) (<= 20 m³)		
		Limit	Actual (Berth 6)	Limit	Actual (Berth 6)	
2	Class 2.3	157	8	---		Packaged materials is total of Class 2.3 as per PHA Table 6.8
	Toxic Gases, DG 2.3	---		26	0	Class 2.3 Tanktainers (bulk) – new figure developed from Technical Note Section 2.5 [Note 3]
	Very Toxic Gases, DG Class 2.3 substances including, Chlorine (UN1017), Sulphur Dioxide (UN1079), Methyl Bromide (UN1062), or Any Class 2.3 substance meeting GHS [Note 4] Acute Toxicity Category 1	---		1	0	---
8	Class 8 only Hydrogen Fluoride (UN 1052)	11	0	13	0	HF numbers as per PHA (rev 7) Table 6.8

[Note 1] – PBE (Port Botany Expansion) number are inclusive of all stevedores operating under this consent i.e. Patrick and Hutchison (SICTL)

[Note 2] – Contents weight can be used to assign container numbers to a Net Explosive Quantity (NEQ) range. 1 te NEQ can be assumed to equal 1.

[Note 3] – 21137-TN-001 Rev 0 22 May 2017

[Note 4] – UN chemical classification, Globalised Harmonised System (GHS)