





# Stolthaven Annual Review 2022

Stolthaven Australia Pty Ltd

20 June 2023

→ The Power of Commitment



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# Glossary

Abbreviation	Description
AHD	Australian Height Datum
ALS	Australian Laboratory Services
ANZECC	Australian and New Zealand Environment and Conservation Council
AST	Above ground storage tank
BTEX	Benzene, toluene, ethylbenzene and xylenes
BTEXN	Benzene, toluene, ethylbenzene, xylenes and naphthalene
COC	Chain of custody
COPC	Contaminants of potential concern
CRC CARE	Cooperative Research Centre for Contamination Assessment and Remediation of the Environment
CSM	Conceptual site model
CSMP	Contaminated Site Management Plan
DBYD	Dial Before You Dig
DNAPL	Dense non-aqueous phase liquid
DO	Dissolved oxygen
DPE	Department of Planning and Environment
DQI	Data quality indicator
DQO	Data quality objective
DTW	Depth to water
EC	Electrical conductivity
EIL	Ecological Investigation Level
EIS	Environmental Impact Statement
EPA	NSW Environment Protection Authority
EPL	Environment Protection License
ESA	Environmental Site Assessment
ESL	Ecological Screening Level
GAC	Groundwater assessment criteria
GIL	Groundwater Investigation Level
GME	Groundwater monitoring event
GPR	Ground penetrating radar
HCCDC	Hunter and Central Coast Development Corporation
HIL	Health Investigation Level
HSL	Health Screening Level
JSEA	Job Safety Environmental Analysis
LNAPL	Light non-aqueous phase liquid
LOR	Limit of reporting
m AHD	metres Australian Height Datum
m bgl	Metres below ground level
M bTOC	Metres below top of casing

Abbreviation	Description
MCP	Mayfield Concept Plan
MGA	Map Grid Australia
mg/L	Milligrams per litre
mg/m <sup>3</sup>	Milligrams per metre <sup>3</sup>
ML	Mega litre
MNA	Monitored Natural Attenuation
NAPL	Non-aqueous phase liquid
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NHMRC	National Health and Medical Research Council
PID	Photo-ionisation detector
PON	Port of Newcastle
ppm	Parts per million
PSD	Particle size distribution
QA/ QC	Quality assurance/quality control
REDOX	Oxidation-reduction potential
RPD	Relative Percent Difference
SFOP	Standard field operating procedures
SPR	Source pathway receptor
SSD	State significant development
SWL	Standing water level
SWMP	Stormwater Management Plan
TIA	Traffic Impact Assessment
TDS	Total dissolved solids
TOC	Top of casing
TPH	Total petroleum hydrocarbons
TRH	Total recoverable hydrocarbons
TSS	Total suspended solids
µg/L	Micrograms per litre
µS/cm	Micro siemens per centimetre
UPSS	Underground Petroleum Storage System
USCS	Unified Soil Classification System
UST	Underground storage tank
VOC	Volatile organic compound
WMP	Waste Management Plan
WHS	Work health and safety
WPCG	Work Place Clearance Group

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# 1. Introduction

GHD Pty Ltd (GHD) was engaged by Stolthaven Australia Pty Ltd (Stolthaven) to prepare the 2022 Annual Review to assess the environmental performance of the fuel import storage and dispatch facility located at the former BHP Steelworks, approximately 5 km north west of the Newcastle CBD (the site). The site is operated under the State Significant Development (SSD) development consent SSD\_7065 issued on 15 December 2016 to expand the existing operations under SSD\_6664 (now surrendered). The site was originally approved under the now superseded Part 3A of the EP&A Act, under Project Approval MP08\_130 and SSD\_6664, which have now been relinquished.

This Annual Review has been prepared in accordance with Condition D9 of SSD\_7065 and the letter addressed to Stolthaven from Department of Planning and Environment (DPE) dated 23 February 2017. The 2022 Annual Review includes the reporting period from 1 January to 31 December 2022.

The site location and approved terminal layout are presented in Figure 1 and Figure 2 respectively in Appendix A. In Figure 2, the indicated blue “expansion area” and red “current area” make up the development consent boundary of SSD\_7065.

## 1.1 Objective

The objective was to assess the environmental performance to the satisfaction of the Director General of DPE to comply with Condition D9 of SSD\_7065 and present results in the 2022 Annual Review.

## 1.2 Scope of works

The scope of work comprised:

- An overview of the site.
- A description of the operations undertaken throughout 2022 which represents the reporting period.
- Analysis of the environmental monitoring results for the reporting period with comparison to the relevant performance criteria and historical data.
- Analysis of trends in monitoring data over the life of the site (as reported by AECOM 2022a, 2022b, 2022c and 2022d).
- A summary of recommendations to improve the environmental performance of the site.

It is noted that GHD have not independently performed the trend analysis and have relied on data presented in the Quarterly Groundwater Monitoring Reports prepared by AECOM for 2022. This report has been based on the previous 2021 Annual Environmental Management Report (AEMR) (AECOM 2021) and for consistency with previous year reporting we have maintained a similar format level of content for ease of DPE review.

## 1.3 Consultation

A copy of this report was provided to the Port of Newcastle (PON) on 1 March 2023 to review prior to finalisation. Following review of the draft report PON confirmed on 14 March 2023 that they had no comments or questions in regard to the content of this report.

## 1.4 Limitations

This report: has been prepared by GHD for Stolthaven Australia Pty Ltd and may only be used and relied on by Stolthaven Australia Pty Ltd for the purpose agreed between GHD and the Stolthaven Australia Pty Ltd as set out in Section 1.1 of this report.

GHD otherwise disclaims responsibility to any person other than Stolthaven Australia Pty Ltd arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report (refer Section 13.5 of this report). GHD disclaims liability arising from any of the assumptions being incorrect.

GHD has prepared this report on the basis of information provided by Stolthaven Australia Pty Ltd and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.

GHD has not been involved in the preparation of the AECOM monitoring reports and has had no contribution to, or review of the AECOM monitoring reports. GHD shall not be liable to any person for any error in, omission from, or false or misleading statement in, any other part of the AECOM monitoring reports.

## 2. Site description

The site is located on part of the former BHP Steelworks Site, within the Port of Newcastle. The site and surrounding area is characterised by a mixture of commercial/industrial uses, residential uses and port related activities.

### 2.1 Site identification

The site identification details are summarised in Table 2.1.

Table 2.1 Site identification details

Item	Description
Site Name	Stolthaven bulk fuel storage facility
Street Address	BHP Steelworks site - Steel Works Road and Iron Ore Road
Certificate of Title Details (Vol/Folio) and Parcel/Lot Number	Lot 2, DP 1177466 (operational area) Lots 36, 37 and 38, DP 1191723 (expansion area)
Owner	Port of Newcastle
Property Occupier	Stolthaven Australia Pty Ltd
Current Use	Bulk fuel storage facility
Site Zoning	SP1 – Special Activities

### 2.2 Surrounding land use and zoning

The surrounding land uses are summarised below in Table 2.2.

Table 2.2 Description of surrounding land use and respective zonings

Orientation	Description of Surrounding Land Use	Zoning (T&I SEPP 2021)
North	Mayfield Berth No. 7, the Hunter River (South Arm) NCIG and Port Waratah Coal Services Coal Loaders	SP1 (Special Activities)
South	Industrial land (including land that has been remediated as part of the BHP Steelworks remediation) followed by the South Channel Hunter River and Kooragang Island beyond	SP1 (Special Activities)
East	Former BHP Steelworks Site, currently remediated vacant land and Koppers Australia pipeline and pumping station	SP1 (Special Activities)
West	Iron Ore Road followed by industrial properties.(One Steel operations)	SP1 (Special Activities)

### 2.3 Site layout

The approved terminal layout as presented in Figure 2, Appendix A consists of the following:

- Ship unloading facilities at the Mayfield Berth 7 (M7) wharf facility (not subject to SSD\_7065 but operated by Stolthaven)
- A delivery pipeline from M4 (removed 2019) and M7 to the terminal
- Nine storage tanks from 535 m<sup>3</sup> to 18,003 m<sup>3</sup>
- A four bay automated truck loading and unloading facility
- Pumping capacity for bulk tanker (truck loading)
- Appropriate drainage and spill containment systems
- Fire protection systems

## 2.4 Identified aboveground storage tanks

The site plan indicates nine storage tanks predominantly located in the eastern portion of the site, adjacent to the truck loading gantry. Tank details are provided in Table 2.3.

Table 2.3 Tank details

Tank ID No	Product	Tank Diameter (m)	Shell Height (m)	Capacity (m <sup>3</sup> )
1	Diesel	36.6	17.1	17,703
2	Diesel	36.6	17.1	17,695
3	Diesel	36.6	17.1	17,691
4	Biodiesel	7.6	12.0	535
5	Diesel	36.6	17.1	17,584
6	Diesel	36.6	17.1	17,611
7	Biodiesel	18.0	17.0	4,242
8	Diesel	36.6	17.1	17,998
9	Diesel	36.6	17.1	18,003

## 2.5 Site history

The site is located part of the former BHP Steelworks site. A summary of the site history has been summarised by GHD (2022) in Table 2.4 and is consistent with the site history summarised in the 2021 Annual Review prepared by GHD.

Table 2.4 Site history

Date	Ownership/operation
1915 – 1999	BHP Steelworks
1999	Closure of the steelworks operations. The site area was referred to as the Closure Area.
14 June 2001	The Environment Protection Authority (EPA) declared the Closure Area Site to be a remediation site under former Section 21 of the <i>Contaminated Land Management Act 1997</i> (CLM Act)
2002	Ownership transferred to the State Government
30 August 2005	APE issued a Voluntary Remediation Agreement (VRA No 26025) for the remediation of the site.
2007	The State Government created the Hunter and Central Coast Development Corporation (HCCDC) (formerly the Regional Land Management Corporation Pty Ltd) to manage the daily operations of the site. HCCDC have committed to undertake the requirements of the VRA.
March 2008	A Contaminated Site Management Plan (CSMP) for the Closure Area Site was prepared by HCCDC.
Mid 2008	HCCDC completed Stage 1 of the remediation works
2012	State government handed over ownership to Port of Newcastle (PON). A concept plan application for the future strategic development of the former BHP Steelworks Site was approved by the Minister for Planning in July 2012. The Concept Plan approval made provision for the future development of part of the former BHP site for bulk liquid related industries.
June 2012	Stolthaven received initial approval for the site and became the first operation active on the former BHP Steelworks Site. Currently there is one other operation currently active on the former BHP Steelworks Site, being the Cargo Storage Facility (DA 8137). PON also operates Mayfield No.4 berth (M4) within the Concept Plan area, which is a general purposes berth used by Stolthaven for the import of fuels until October 2018, when Mayfield 7 berth was commissioned.
2013	Stage 2 of the remediation works were completed.

## 2.6 Operations and approval

Operations and approval for the site as reported by GHD 2022 are as follows:

The site operated in accordance with SSD\_6664 (issued on 16 April 2015 under Part 4 of the EP&A Act) until 8 May 2020 when it was surrendered. The site and Mayfield No. 7 Berth pipeline (but not the berth itself) now operate in accordance with SSD\_7065.

The site was originally approved under Project Approval MP 08\_0130, issued on 8 June 2012 under the former Part 3A (repealed) of the EP&A Act. Site operations are described in Table 2.5.

Table 2.5 Approvals

Approvals	Section	Expiry Date
Original Project Approval MP08_0130	Section 2.6.1	NA
Development Consent SSD_6664	Section 2.6.2	SSD_6664 was surrendered on 8 May 2020 as per letter from DPE in Appendix B.
Current Development Consent SSD_7065	Section 2.6.3	As per Condition B5 of the SSD_7065, this consent lapses five years from the date of approval (i.e. 15 December 2021) <sup>1</sup>
Environment Protection Licence (EPL) 20193	Section 2.6.4	NA
Concept Plan MP09_0096	Section 2.6.5	NA

<sup>1</sup>Letter "Approval of Progressive Submission of Environmental Management Strategy and stage 1 Environmental Management Strategy signed on 24/10/18 from delegate of the Planning Secretary which has been provided to GHD by Stolthaven to demonstrate that the consent has been activated.

### 2.6.1 Original Project Approval MP08\_0130

The original Project Approval MP08\_0130 was approved by the Minister for Planning on 8 June 2012 under Part 3A (repealed) of the EP&A Act and was subsequently modified three times. The project approval was surrendered on 3 December 2015. The original project comprised the following elements:

- Use of an existing ship berthing facility via M4 to deliver fuels from bulk tankers. Fuel to be pumped along a 300 mm diameter steel pipeline from M4 to the site.
- Storage of bulk fuels in above ground tanks (3 x 18 ML diesel and 0.5 ML biodiesel) with a total permitted annual throughput of 300 ML combined.
- Distribution of fuels by road tankers.
- Ancillary components including site office, car parking and truck loading gantry.

Construction of the site as approved under the original Project Approval was completed in late 2013, with the first shipment of fuels commencing 19 November 2013.

Subsequent modification to the original Project Approval included the following:

- MOD 1 (Approved 26 July 2013) – Two additional 18 ML diesel tanks, one additional 4.2 ML biodiesel tank and an additional 100 ML pa throughput.
- MOD 2 (Approved 15 November 2013) – Paper modification to the wording of Condition 6 to remove reference to the Department of Health. i.e. no changes to the composition of the approved facility.
- MOD 3 (Approved 10 July 2014) – Increase throughput from 400 ML pa to a total of 500 ML pa. No additional tanks or infrastructure.

## 2.6.2 Development consent SSD\_6664

Stolthaven operated under SSD development consent 6664 (SSD\_6664) which was issued under Part 4 of the EP&A Act following a request for increase to the throughput of the facility and to construct two additional storage tanks. The SSD\_6664 consent transferred the site from the MP08\_0130 Part 3A approval to an SSD approval. One of the conditions of SSD\_6664 included the requirement to surrender Project Approval MP08\_0130. The SSD\_6664 consent permitted the facility's capacity to be increased through an additional:

- Two 18 ML diesel storage tanks
- Throughput to total 1,010 ML pa

Following the approval of SSD\_6664, a modification to SSD\_6664 was approved to increase the annual throughput from 1,010 ML to 1,300 ML per year. SSD\_6664 Modification 1 did not require an increase in storage capacity at the site nor did it require construction of additional fuel storage tanks or associated infrastructure. This modification was approved on 28 September 2015. SSD\_6664 was surrendered on 8 May 2020 as per the letter from DPE in Appendix B.

## 2.6.3 Development consent SSD\_7065 (current approval)

Development consent SSD\_7065 was issued on 15 December 2016 to expand the existing operations under SSD\_6664.

Stolthaven applied to expand its existing fuel storage at Mayfield. This expansion involved:

- Increasing the throughput of the facility from 1,300 ML to 3,500 ML per year.
- Importing flammable fuels (petroleum, ethanol and jet fuel), in addition to combustibles (diesel and biodiesel) already imported.
- 17 new fuel storage tanks and bunds, in addition to the 10 existing tanks.
- A marine loading arm, pumps and dual pipeline to transfer fuels to the terminal from ships docking at the new Mayfield No.7 berth.
- A new six bay truck loading gantry, vapour control system, office and firefighting systems.

DPE approved the application on 15 December 2016, which allows for an increase in throughput of 3,500 ML per year and the ability to store flammable liquids. SSD\_7065 was partly triggered during the 2018 reporting period for the construction and operation of the new combustible pipeline following the completion of the Mayfield No. 7 Berth construction. The total allowable throughput of the facility currently remains at 1,300 ML. This has not changed during this reporting period.

Accordingly, the site EPL 20193 was amended in September 2018 to support the change in development consent and is discussed further below in Section 2.6.4.

Correspondence from DPE regarding a progressive submission of the Stage 1 Construction Environmental Management Plan (CEMP) and Stage 1 Pre-Construction Hazard Studies (PCHS) for the works involved with SSD\_7065 is provided in Appendix B. It is noted that approval was received from DPE for the CEMP and PCHS for Construction Stage 1 only.

## 2.6.4 Environmental Protection Licence

The site operates under EPL 20193, which is administered by the NSW EPA under the *Protection of the Environment Operations Act 1997* (POEO Act). A variation to EPL 20193 was approved on 2 October 2015 to incorporate the modifications made under SSD\_6664 Modification 1.

Up until mid-2018, EPL 20193 permitted the scheduled activities of Chemical Storage, Shipping in Bulk and Extractive Activities on the site. The Extractive Activities approved under EPL 20193 related to the dredging operations being undertaken for construction of the Mayfield Berth No. 7, which is complying development.

EPL 20193 has most recently been amended on 27 August 2021 (Variation notice number 1611736). This variation included the following changes to conditions:

- A1.4 (previous) - Removed -The condition reference throughput limits which no longer apply as the Premises adheres to load limits set in the Licence.
- A1.5 (previous) - Varied - The condition number has been changed to A1.4 and NOTE: now refers to (A1.3 and A1.4) due to the removal of the previous P1.4 as discussed above.
- E1.1 (previous) - Varied - Removed VRU requirement Part (a) which was triggered by the 1300 ML throughput limit for condition A1.4 which no longer applies.

## 2.6.5 Other relevant approvals

### Mayfield concept plan approval

Concept Plan (MP09\_0096) was approved by the Minister under Section 75M of the EP&A Act on 16 July 2012 to enable development of the former BHP Steelworks site (known as the Closure Area or Concept Plan area), a 90 hectare portside portion of land on the South Arm of the Hunter River within which the site sits. The approval under which the site now operates (SSD\_7065) demonstrated that it was consistent with the Concept Plan approval in order for the Minister to approve SSD\_7065.

### Mayfield Berth No. 4 DA-293-08-00

Development Consent DA-293-08-00 MOD 9, dated 29 August 2013, is applicable to the M4 berth, and ships loading or unloading at this berth must comply with relevant conditions of this consent.

It is noted that, as of the variation approval on 31 January 2020, any associated infrastructure at Mayfield No. 4 Berth is no longer in control or operation of Stolthaven. In addition, the pipeline that previously connected the terminal to M4 has since been decommissioned and removed and all fuel imports now occur through M7 as described below.

### Mayfield Berth No. 7 – Complying development certificate

Stolthaven constructed a dedicated bulk liquids berth to service both the site and other bulk liquid operators in mid-2018. Under the provisions of *State Environmental Planning Policy (Transport and Infrastructure) 2021* (T&I SEPP) the construction of the berth is complying development. A complying development certificate was obtained from Newcastle City Council. The berth became operational during the 2018 reporting period and began accepting fuels in late October 2018.

## **3. Site operations**

### **3.1 Description of operations**

Operations undertaken at the site include the receipt, storage and dispatch of bulk diesel and biodiesel, as well as bulk tanker loading at Mayfield No. 7 Berth (M7). The site operates 24 hours a day, seven days a week. The site is partially automated and manned with Stolthaven personnel undertaking daily inspections on business days.

Primary operations include:

- The bulk storage of diesel and biodiesel at the site in the storage tanks listed in Table 2.3.
- The bulk transfer of diesel fuel or bio-diesel fuel (as required) from berthed ships to the site's above ground storage tanks.
- The filling of road tankers with diesel and biodiesel products for transfer to customers.

### **3.2 Operational changes in 2022**

#### **3.2.1 Independent Environmental Audit**

The Independent Environmental Audit (IEA) was completed and issued on 28 April 2022. Four recommendations were made. Recommendations and responses are provided in Section 13.4.

#### **3.2.2 Other operational changes**

The following operational changes or activities are noted as occurring during the reporting period:

- Tank NN2 was taken out of service for routine maintenance 10 year off stream inspection. The tank was cleaned and inspected including thickness testing to API 653 standards. The tank internal floor paint was removed, minor repairs undertaken and re-painted. New access and walkway installed on NN1 and bridge installed from NN1 to NN2.
- Material stockpiled from the Mayfield 7 berth project was re-used to form a roadway at the northwest end of Lot 1. The work was undertaken in consultation with the Mayfield Concept Area Site Auditor and Port of Newcastle with third party verification.

### **3.3 Site management plans and strategies**

The site operates under an existing set of management plans and in accordance with the SSD\_7065 consent and the site Operational Environmental Management Plan.



## 4. Groundwater

Groundwater quality at the site is monitored in accordance with a groundwater monitoring program (GMP) (AECOM 2022) and the conditions of EPL 20193.

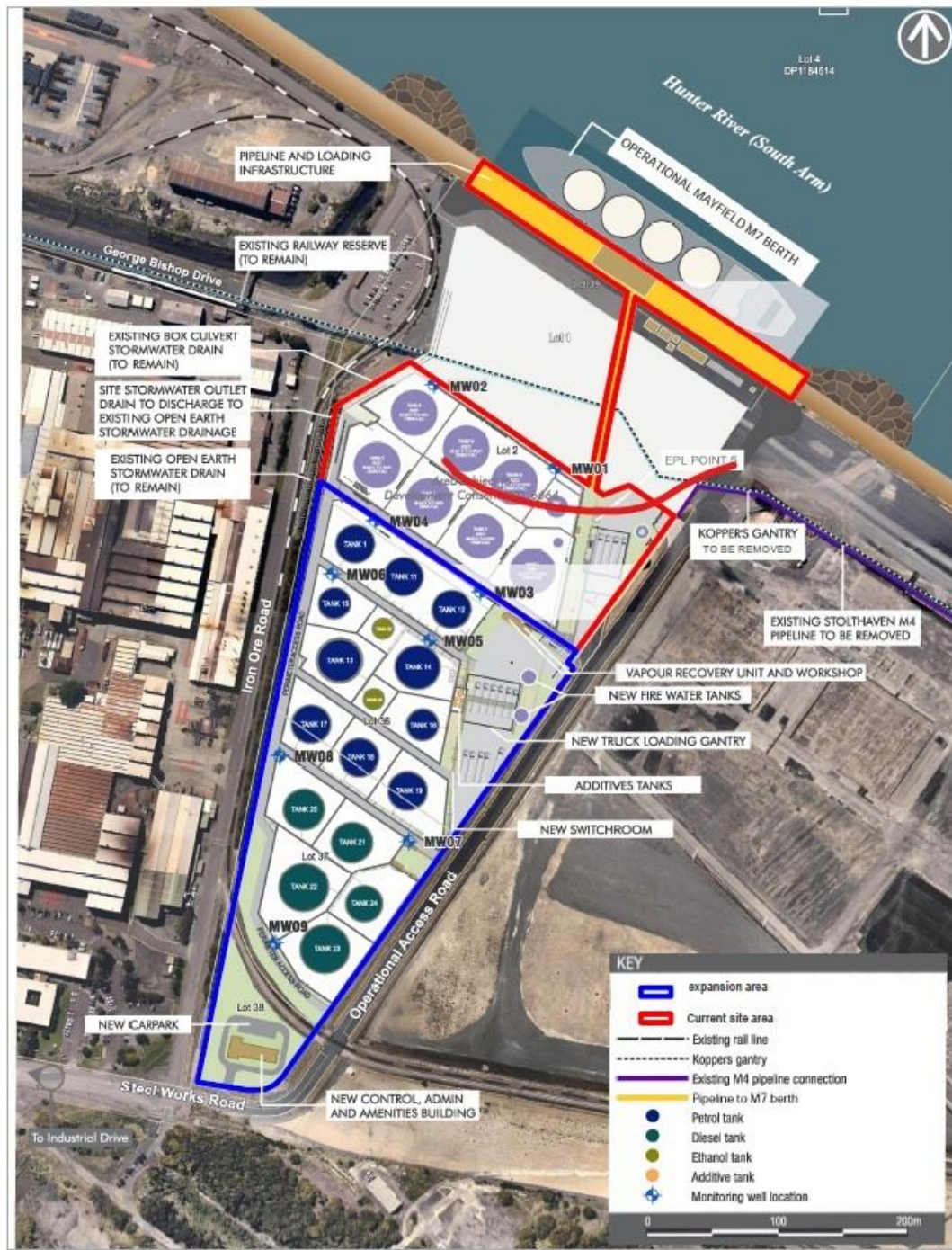
The details of the groundwater wells and scheduled monitoring events are presented in Table 4.1. Groundwater wells MW05 to MW09 were installed in the Expansion Area in 2017. Temporary groundwater wells MW08A and MW08B were installed in 2018 following recorded exceedances of the criteria in MW08.

**Table 4.1** Groundwater monitoring points at the site

EPA Identification Number	Monitoring Well Reference (AECOM 2019)	Installation date	Sampling Frequency
1	MW01	October 2013	Quarterly
2	MW02	October 2013	Quarterly
3	MW03	October 2013	Quarterly
4	MW04	October 2013	Quarterly
16	MW05	July 2017	Quarterly
17	MW06	July 2017	Quarterly
18	MW07	July 2017	Quarterly
19	MW08	July 2017	Quarterly
n/a	MW08A	2018	Temporary
n/a	MW08B	2018	Temporary
20	MW09	July 2017	Quarterly

Background monitoring was conducted prior to commencement of operations in 2013 to assess the condition of groundwater entering and leaving the site (particularly for the presence of petroleum hydrocarbons) in order to establish baseline groundwater quality within the site. Background monitoring was conducted in the Approved Expansion Area during the fourth quarter of 2017 to provide groundwater conditions at the site prior to operations within this area. Background concentration ranges are presented in the summary tables in Section 6.

Groundwater monitoring well locations are shown on Figure 4.1.



Paper Size ISO A4  
 0 0.025 0.05 0.075 0.1 0.125  
 Kilometers  
 Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 58

**GHD**

Stolthaven Australia Pty Ltd  
 Stolthaven Bulk Fuel Storage Facility  
 Annual Report 2022

Project No. 12545253  
 Revision No. 0  
 Date 02/02/2023

**FIGURE 2**

Figure 2: Groundwater monitoring well locations. The map shows the layout of the facility with monitoring wells MW01 through MW09. MW01-MW03 are located near the river and berth, while MW04-MW09 are distributed across the tank storage area. The map also shows various infrastructure elements like roads, pipelines, and buildings.

Figure 4.1 Groundwater monitoring well locations

## 5. Assessment criteria

AECOM assessed groundwater against the site Groundwater Assessment Criteria (GAC) as part of the GMP, and the background concentrations established in 2013. The thresholds that form the GAC are sourced from the ANZG (2018) *Australia New Zealand Water Quality Guidelines for Fresh and Marine Waters*, 95% Species Protection for Marine Waters Criterion. Where trigger values have not been published, ANZECC (2000) low reliability trigger values were adopted.

There are no groundwater quality requirements under the site's EPL. The GAC is set out in Table 5.1.

Table 5.1 Groundwater assessment criteria

Compound	Unit	ANZG (2018) 95% Trigger Values	ANZG (2018) 99% Trigger Values
BTEXN			
Benzene	(µg/L)	-	600
Ethylbenzene	(µg/L)	80	-
Toluene	(µg/L)	180	-
o-xylene	(µg/L)	350	-
p-xylene	(µg/L)	200	-
m-xylene	(µg/L)	75	-
Total Xylene	(µg/L)	-	-
Total Recoverable Hydrocarbons			
C6-C10 Fraction	(µg/L)	-	-
C6-C10 - BTEX	(µg/L)	-	-
>C10-C16 Fraction	(µg/L)	-	-
>C16-C34 Fraction	(µg/L)	-	-
>C34-C40 Fraction	(µg/L)	-	-

Samples are analysed for contaminants of concern (CoC) by a NATA accredited laboratory. Indicators of groundwater contamination or adverse quality impact include (but are not limited to) the following:

- Evidence of non-aqueous phase liquid (NAPL) (e.g. a separate hydrocarbon layer)
- Changes in clarity, colour and odour of groundwater
- Increases in concentrations of dissolved hydrocarbons

## 6. Results

Groundwater results for the 2022 monitoring period are presented in Table 6.1 to Table 6.9.

Table 6.1 Groundwater monitoring results - MW01

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	7.66 - 9.05		0.01	9.06	8.96	8.96	8.94
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100 to 380	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.2 Groundwater monitoring results - MW02

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	7.66 - 9.05		0.01	7.53	7.43	7.38	7.54
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100 to 380	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.3 Groundwater monitoring results – MW03

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	7.66 - 9.05		0.01	7.70	7.77	7.80	7.57
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100 to 380	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.4 Groundwater monitoring results – MW04

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	7.66 - 9.05		0.01	7.68	7.67	7.90	7.47
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100 to 380	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.5 Groundwater monitoring results – MW05

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	8.51 - 8.97		0.01	9.89	8.27	8.54	8.93
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC



Table 6.6 Groundwater monitoring results - MW06

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	8.93 - 10.00		0.01	7.53	7.47	7.51	7.93
BTEX (µg/L)							
Benzene	<1 to 5	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.7 Groundwater monitoring results – MW07

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	8.86 - 9.15		0.01	9.32	8.99	8.80	9.55
BTEX (µg/L)							
Benzene	<1	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2-6	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.8 Groundwater monitoring results – MW08

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	6.97 - 7.05		0.01	6.87	6.99	7.27	6.98
BTEX (µg/L)							
Benzene	6,680 to 16,800	600	1	<b>8,860</b>	<b>8,730</b>	<b>6,140</b>	<b>9,110</b>
Ethylbenzene	<50-14	80	2	<50	21	29	30
Toluene	248-725	180	2	<b>621</b>	<b>410</b>	<b>276</b>	<b>341</b>
Xylene (o)	<50-50	350	2	77	67	60	66
Xylene (m & p)	<50	75 <sup>1</sup>	2	<b>183</b>	<b>163</b>	<b>107</b>	<b>125</b>
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	7,840-18,200	-	20	9,650	8,870	6,990	10,000
C6-C10 minus BTEX	<1000-1360	-	20	<1000	<400	<400	<400
>C10-C16 Fraction	5,240-20,400	-	100	14,700	8,740	5,610	8,240
>C10-C16 Fraction minus naphthalene	2,870 to 12,000	-	100	8,140	3,100	1,170	2,680
>C16-C34 Fraction	1,890 to 6,880	-	100	6,440	5,840	2,190	3,740
>C34-C40 Fraction	<100	-	100	220	<280	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

Table 6.9 Groundwater monitoring results – MW09

Analyte	Background range	GAC	Laboratory limit of reporting	Q1 2022	Q2 2022	Q3 2022	Q4 2022
pH	7.86 - 7.95		0.01	7.09	7.12	7.44	7.38
BTEX (µg/L)							
Benzene	6 to 8	600	1	<1	<1	<1	<1
Ethylbenzene	<2	80	2	<2	<2	<2	<2
Toluene	<2	180	2	<2	<2	<2	<2
Xylene (o)	<2	350	2	<2	<2	<2	<2
Xylene (m & p)	<50 to <2	75 <sup>1</sup>	2	<2	<2	<2	<2
Total Recoverable Hydrocarbons (µg/L)							
C6-C10 Fraction	<20	-	20	<20	<20	<20	<20
C6-C10 minus BTEX	<20	-	20	<20	<20	<20	<20
>C10-C16 Fraction	<100	-	100	<100	<100	<100	<100
>C10-C16 Fraction minus naphthalene	<100	-	100	<100	<100	<100	<100
>C16-C34 Fraction	<100	-	100	<100	<100	<100	<100
>C34-C40 Fraction	<100	-	100	<100	<100	<100	<100

<sup>1</sup> Value for m- xylene adopted

**BOLD** denotes exceedance of GAC

## 6.1 Analysis of results

A statistical trend analysis was undertaken by AECOM for selected analytes at nine monitoring locations (MW01 to MW09) to determine if any statistically significant trends were apparent in the dataset. An upper confidence level of 95% was set in order to determine if any trends identified were statistically significant.

Published guidance states that a minimum of six data points are required to perform statistical trend analysis, with greater sample sizes resulting in greater confidence in any trends that are identified. As of this Annual Review, 39 data points are available for trend analysis for MW01 – MW04, with monitoring having commenced in October 2013 and 22 data points are available for trend analysis for MW05 – MW09 with monitoring having commenced in August 2017.

## 6.1.1 MW01

Recorded pH levels at MW01 for this reporting period ranged from 8.94 to 9.06 and were slightly above or within background concentrations. Mann Kendall trend analysis reported a statistically significant decreasing trend in pH levels, however the time series graph shows pH has remained relatively stable and largely within background concentrations throughout the monitoring program.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations, exhibiting no significant trends. The only exception being a recorded concentration of 2230 µg/L of TRH >C<sub>10</sub>-C<sub>40</sub> during the Q4 GME undertaken in November 2017.

The statistical trend analyses for MW01 are presented in Figure 6.1 and Figure 6.2.

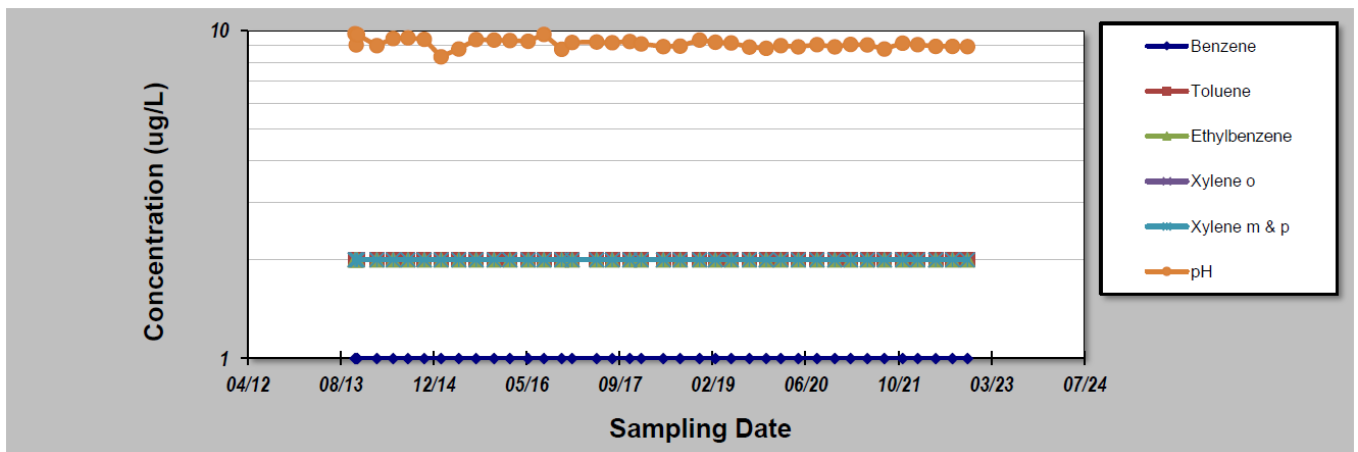


Figure 6.1 Statistical trend analysis of MW01– BTEX and pH (reference AECOM 2022d)

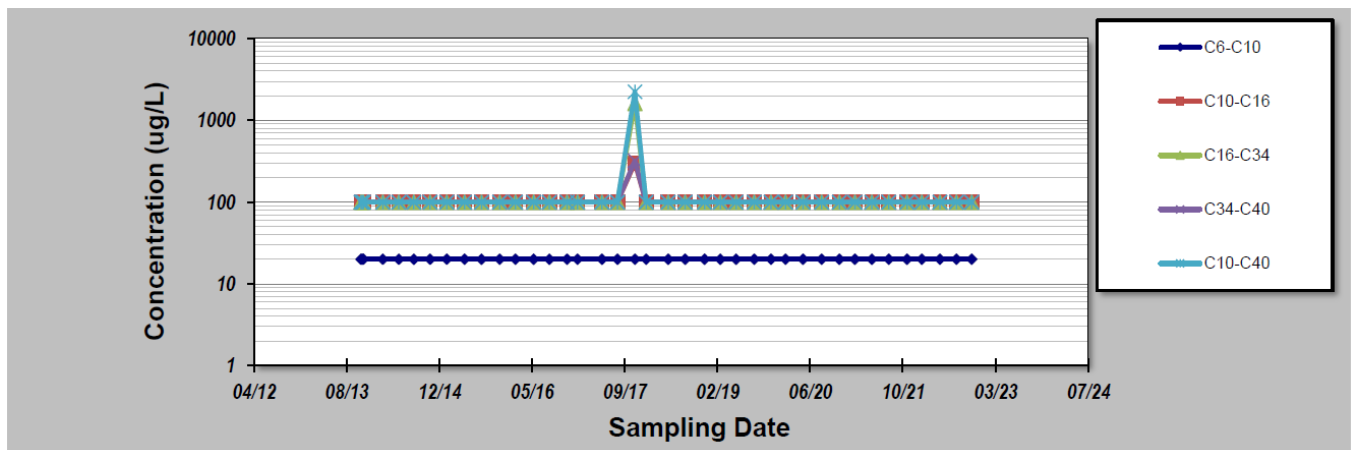


Figure 6.2 Statistical trend analysis of MW01 – TRH (reference AECOM 2022d)

## 6.1.2 MW02

Recorded pH levels at MW02 for this reporting period ranged from 7.38 to 7.54 and were below background concentrations. Mann Kendall trend analysis reported a statistically significant decreasing trend in pH levels, however the time series graph shows pH has remained relatively stable and were below background concentrations throughout the monitoring program.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. BTEX concentrations have been reported below the LOR in all groundwater monitoring rounds with the exception of minor benzene concentrations reported between October 2013 and November 2014. Statistical analysis supports a stable benzene trend.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations, exhibiting no significant trends. The only TRH detection throughout the monitoring program has been TRH C<sub>16</sub>-C<sub>34</sub> concentrations in October 2013. Statistical analysis reported a stable trend for all TRH fractions. The statistical trend analyses for MW02 are presented in Figure 6.3 and Figure 6.4.

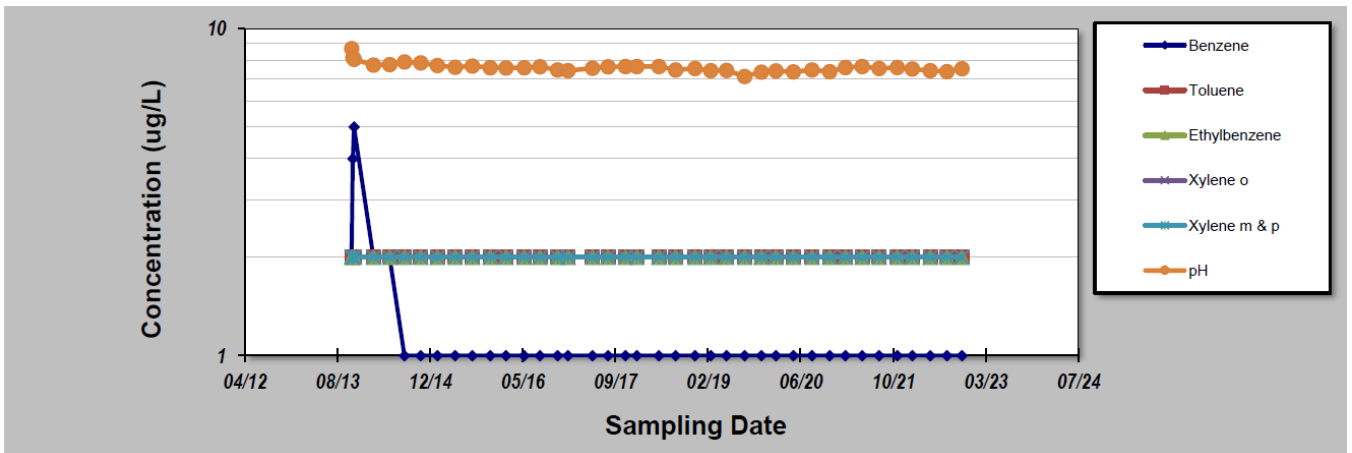


Figure 6.3 Statistical trend analysis of MW02– BTEX and pH (reference AECOM 2022d)

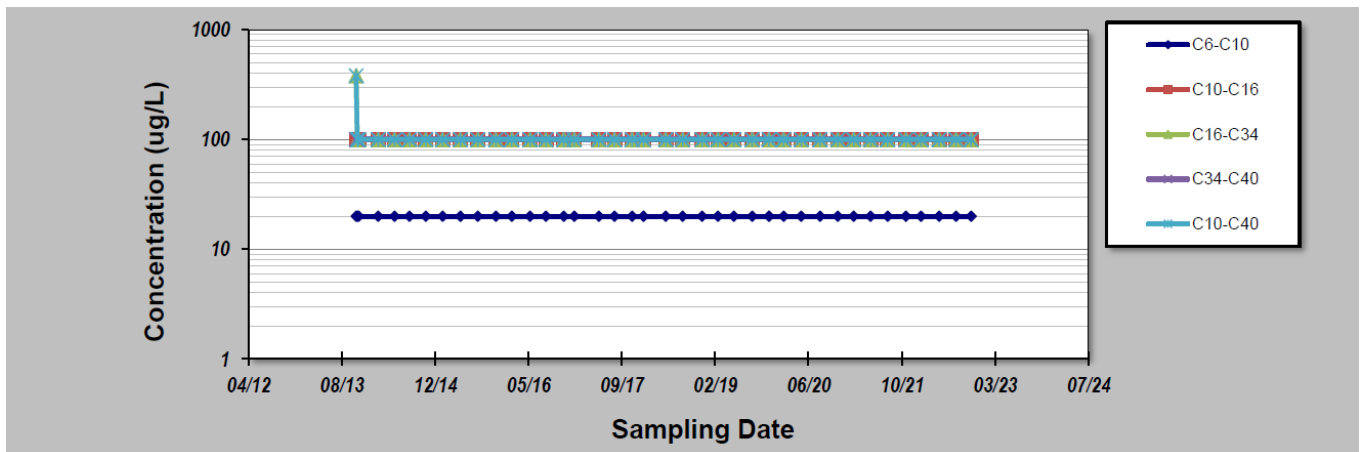


Figure 6.4 Statistical trend analysis of MW02 – TRH (reference AECOM 2022d)

### 6.1.3 MW03

Recorded pH levels at MW03 for this reporting period ranged from 7.57 to 7.80 and were within or slightly below background concentrations. Mann Kendall trend analysis reported decreasing trends in pH levels, however the time series graph shows pH has remained relatively stable and largely within background concentrations throughout the monitoring program.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations, exhibiting no significant trends. The only TRH detection throughout the monitoring program has been TRH C<sub>16</sub>-C<sub>34</sub> concentrations in October 2013. Statistical analysis reported a stable trend for all TRH fractions.

The statistical trend analyses for MW03 are presented in Figure 6.5 and Figure 6.6.

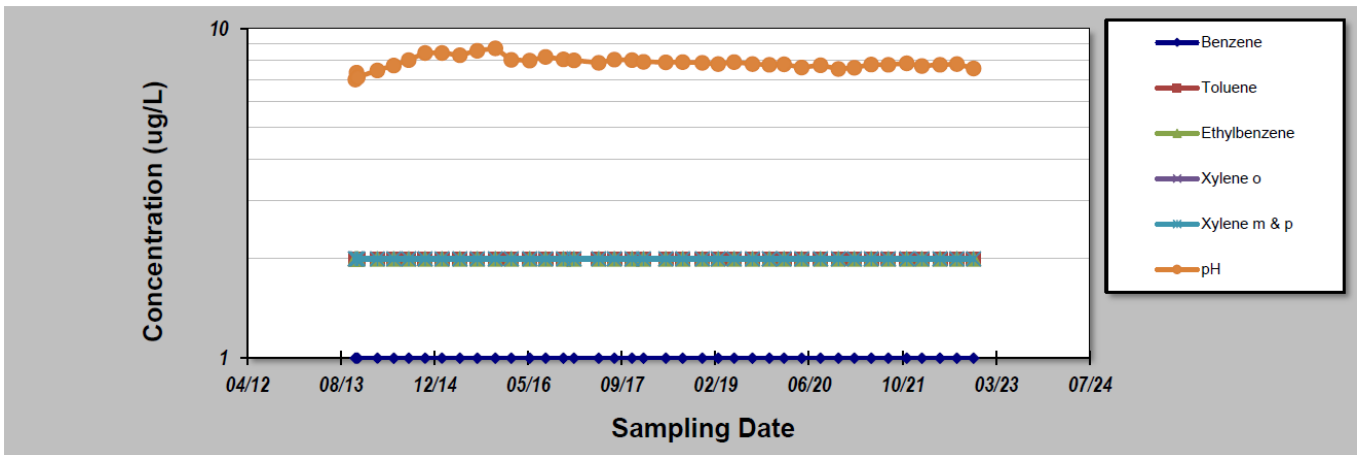


Figure 6.5 Statistical trend analysis of MW03– BTEX and pH (reference AECOM 2022d)

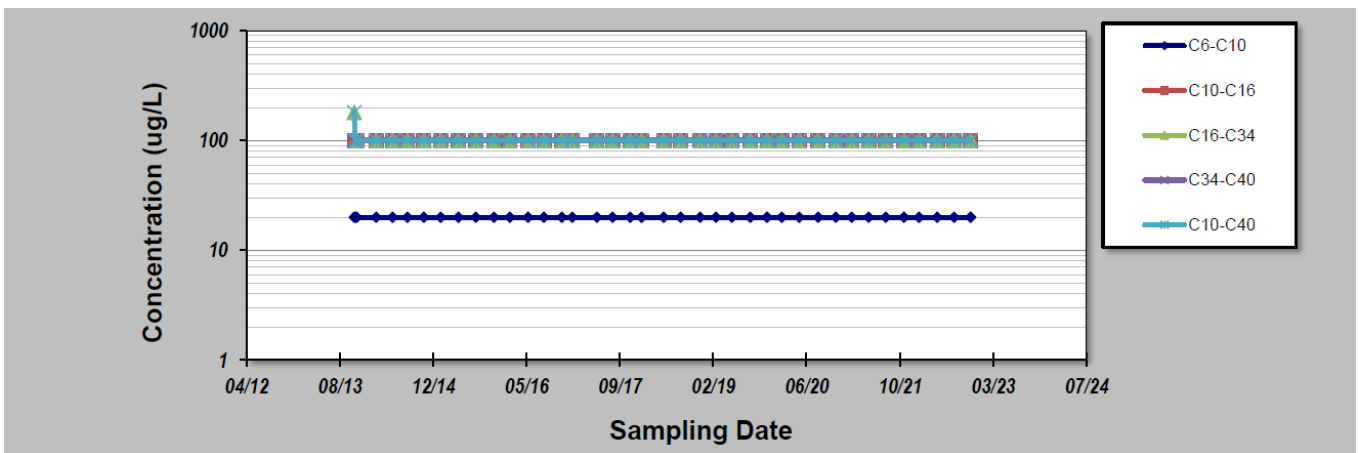


Figure 6.6 Statistical trend analysis of MW03 – TRH (reference AECOM 2022d)

### 6.1.4 MW04

Recorded pH levels at MW04 for this reporting period ranged from 7.47 to 7.90 and were within or slightly below background concentrations. Mann Kendall trend analysis reported a statistically significant decreasing trend in pH levels, however the time series graph shows pH has remained relatively stable and largely within background concentrations throughout the monitoring program.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations, exhibiting no significant trends. Statistical analysis reported a stable trend for all TRH fractions.

The statistical trend analyses for MW04 are presented in Figure 6.7 and Figure 6.8.

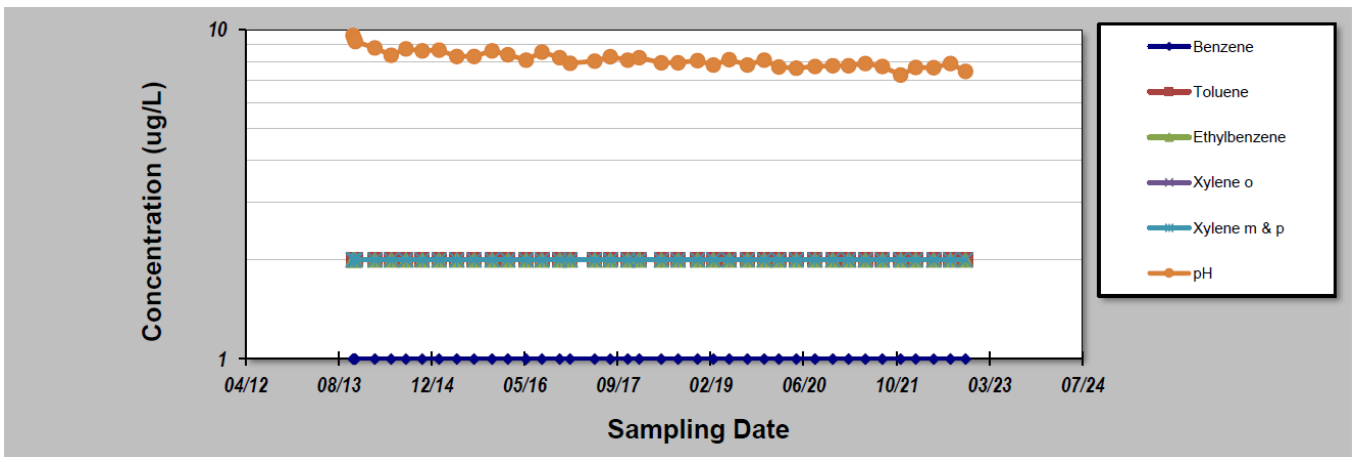


Figure 6.7 Statistical trend analysis of MW04– BTEX and pH (reference AECOM 2022d)

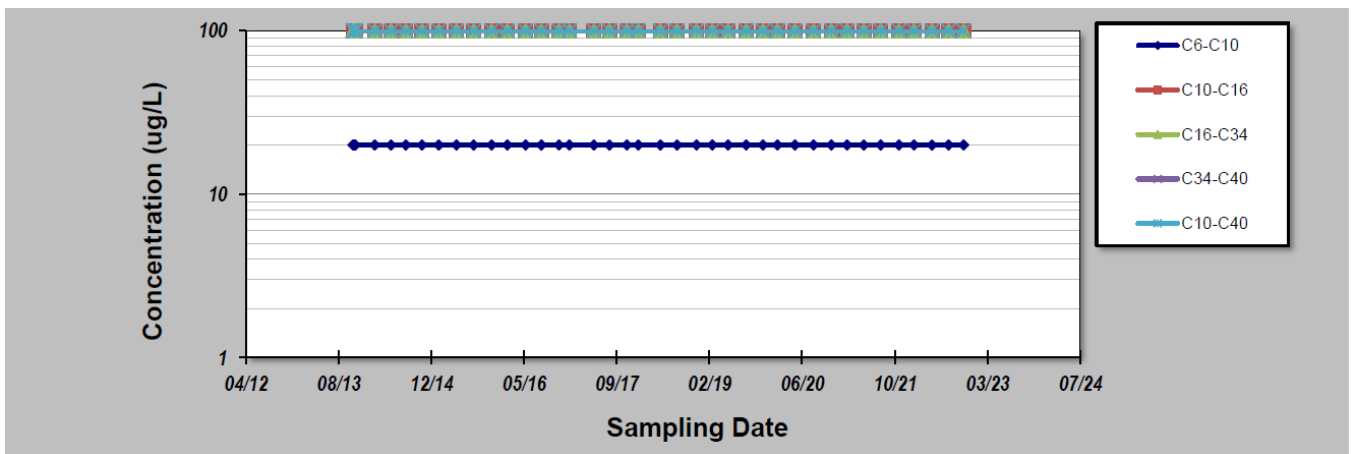


Figure 6.8 Statistical trend analysis of MW04 – TRH (reference AECOM 2022d)

### 6.1.5 MW05

Recorded pH levels at MW05 for this reporting period ranged from 8.27 to 9.89 and were slightly above or within the previously detected range for this location. Mann Kendall trend analysis reported no trend for pH levels.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with all previous concentrations. Statistical analysis reported a stable trend for all TRH fractions.

The statistical trend analyses for MW05 are presented in Figure 6.9 and Figure 6.10.



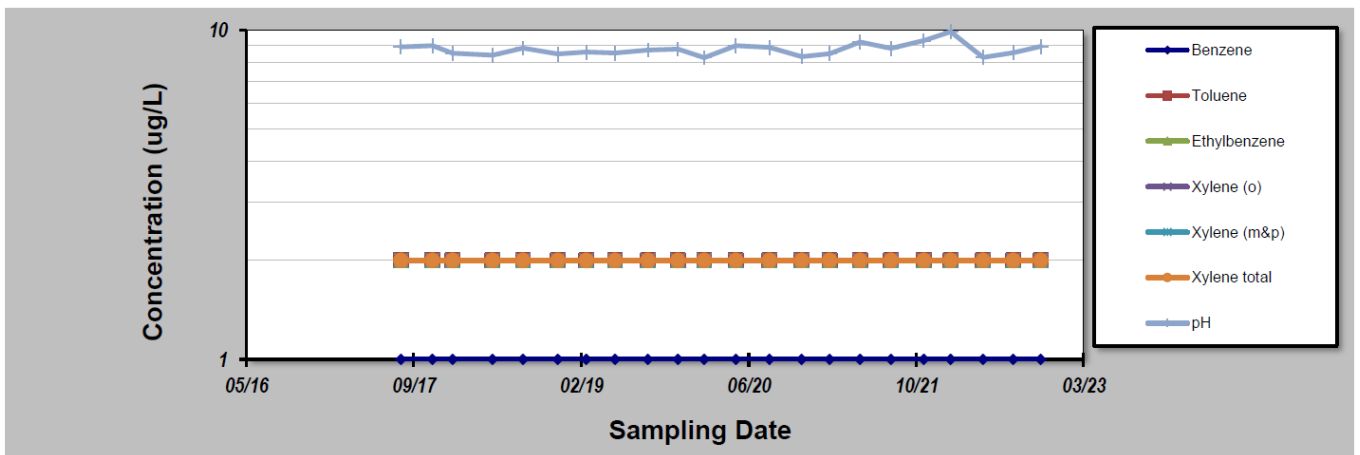


Figure 6.9 Statistical trend analysis of MW05– BTEX and pH (reference AECOM 2022d)

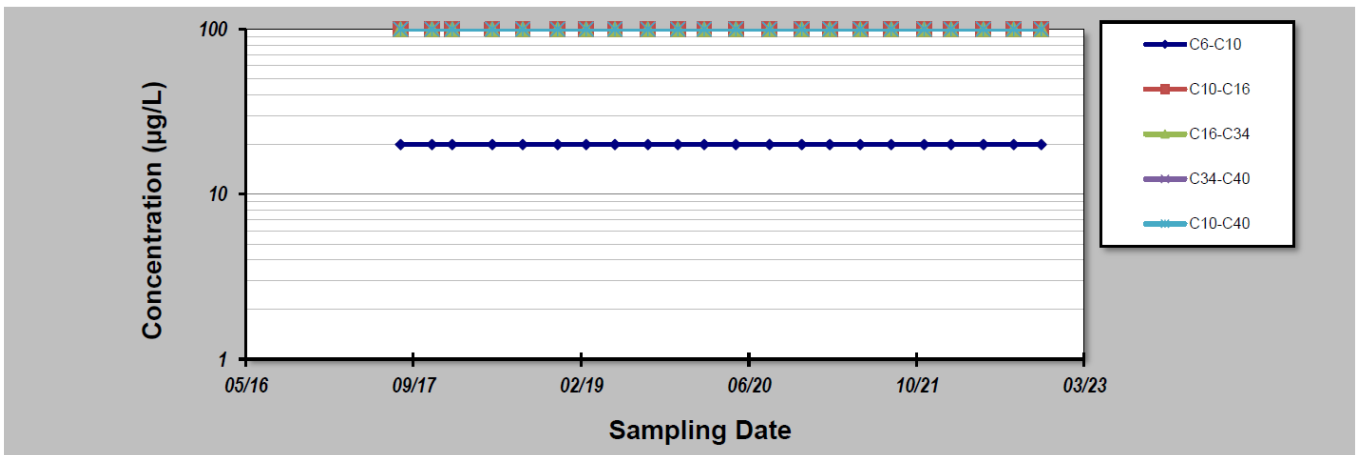


Figure 6.10 Statistical trend analysis of MW05 – TRH (reference AECOM 2022d)

### 6.1.6 MW06

Recorded pH levels at MW06 for this reporting period ranged from 7.47 to 7.93 and were below the previously detected range for this location. Mann Kendall trend analysis reported no trend for pH levels.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with all previous concentrations. Statistical analysis reported a stable or no trend for all TRH fractions.

Concentrations of TRH have been reported consistently less than the LOR since commencement of quarterly monitoring, with the exception of:

- Concentrations of TRH C<sub>16</sub>-C<sub>34</sub> fraction recorded at MW06 (150 µg/L) and TRH C<sub>10</sub>-C<sub>40</sub> fraction at MW06 (180 µg/L) recorded in the initial baseline GME (August 2020).

The statistical trend analyses for MW06 are presented in Figure 6.11 and Figure 6.12.

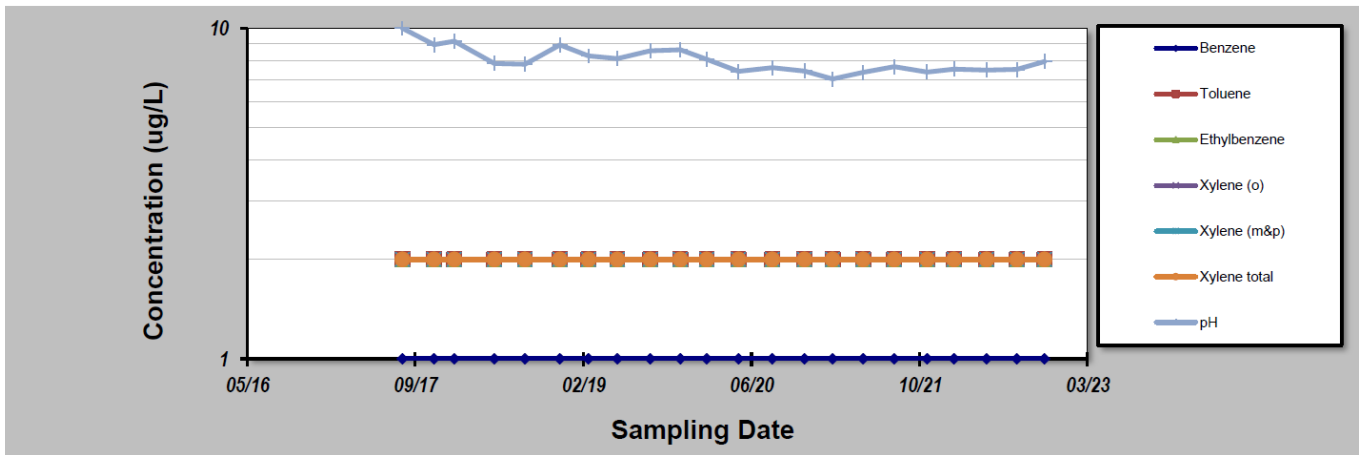


Figure 6.11 Statistical trend analysis of MW06– BTEX and pH (reference AECOM 2022d)

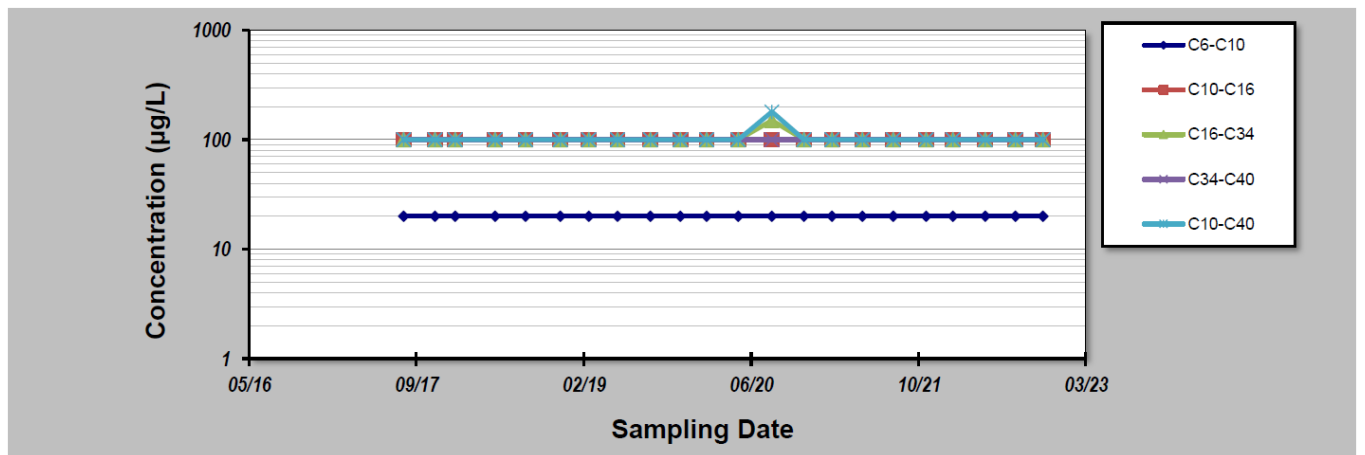


Figure 6.12 Statistical trend analysis of MW06 – TRH (reference AECOM 2022d)

### 6.1.7 MW07

Recorded pH levels at MW07 for this reporting period ranged from 8.80 to 9.55 and were slightly above or within the previously detected range at this location. Mann Kendall trend analysis reported no trends for pH levels.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with all previous concentrations. Statistical analysis reported a stable trend for all TRH fractions.

The statistical trend analyses for MW07 are presented in Figure 6.13 and Figure 6.14.

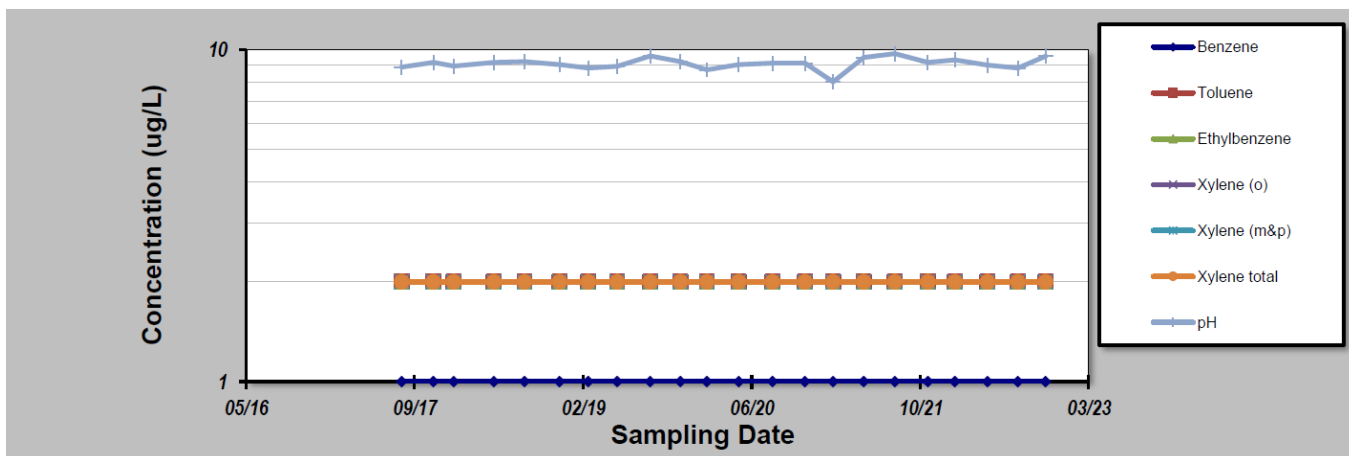


Figure 6.13 Statistical trend analysis of MW07– BTEX and pH (reference AECOM 2022d)

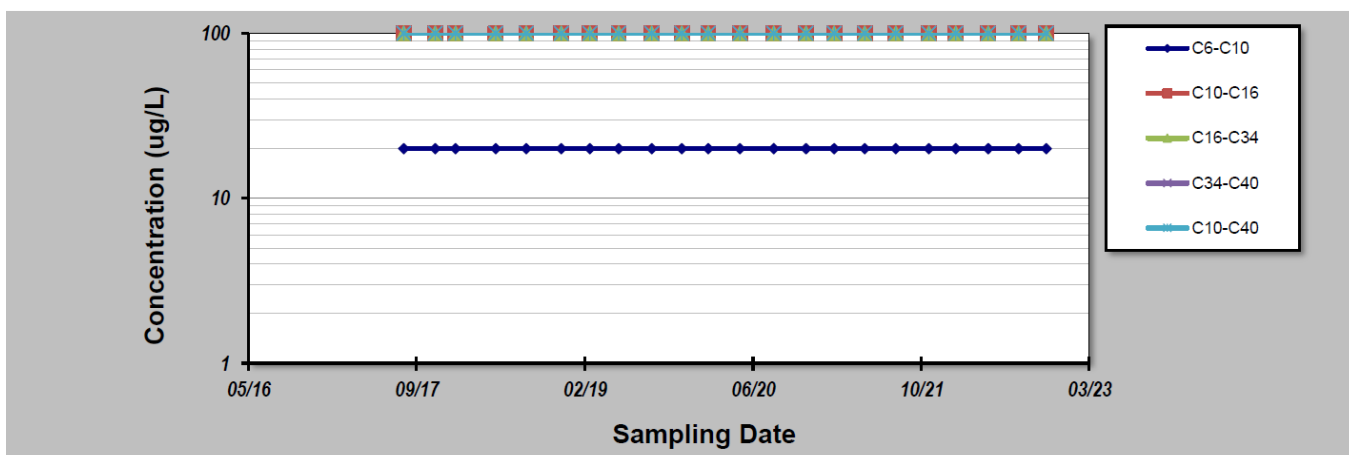


Figure 6.14 Statistical trend analysis of MW07 – TRH (reference AECOM 2022d)

## 6.1.8 MW08

Recorded pH levels at MW08 for this reporting period ranged from 6.87 to 7.27 and were within, slightly above or slightly below the previously detected range at this location. Mann Kendall trend analysis reported a stable trend for pH levels.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with all previous concentrations.

Sampling during subsequent monitoring events generally reported TRH concentrations less than the LOR:

- Concentrations of TRH above the LOR were reported within the PDR's at MW08 with the exception of >C<sub>10</sub>-C<sub>16</sub> Fraction less Naphthalene (F2) reported marginally below the PDR.
- Concentrations of ethylbenzene, xylenes (o) and xylenes (m&p) were reported greater than the PDR at MW08, consistent with the previous GME.
- CoPC detected at MW08 are inferred to be residual contamination impacts believed to be associated with the remediation of the former BHP Steelworks site and unrelated to Stolthaven operations. Notwithstanding, the elevated CoPC concentrations reported at MW08 appear localised to this monitoring location.

Stolthaven undertook installation of two wells in March 2018 to the north-east and south of MW08 to delineate impacts at MW08. Sampling of MW08A (north-east) and MW08B (south) was undertaken in April 2018 and during the Q3 2018 monitoring which indicated CoPC concentrations were less than the LOR at MW08A and negligible at MW08B. It was considered residual contamination impacts at MW08 were sufficiently delineated to the north-east and south by MW08A and MW08B, respectively. MW08A and MW08B were not sampled during the November 2022 GME.

Suspected DNAPL was encountered at MW08. DNAPL comprised “coal tar”-like material and had a hydrocarbon-like odour.

As stated, BTEX concentrations were above the previously detected range at MW08 during the 2022 monitoring period with the following exceedances of the GAC recorded:

- Benzene in all four quarters ranging between 6,140 µg/L and 9,110 µg/L
- Toluene in all four quarters ranging between 276 µg/L and 621 µg/L
- Xylene (m & p) in all four quarters ranging between 107 µg/L and 183 µg/L

The statistical trend analyses for MW08 are presented in Figure 6.15 and Figure 6.16.

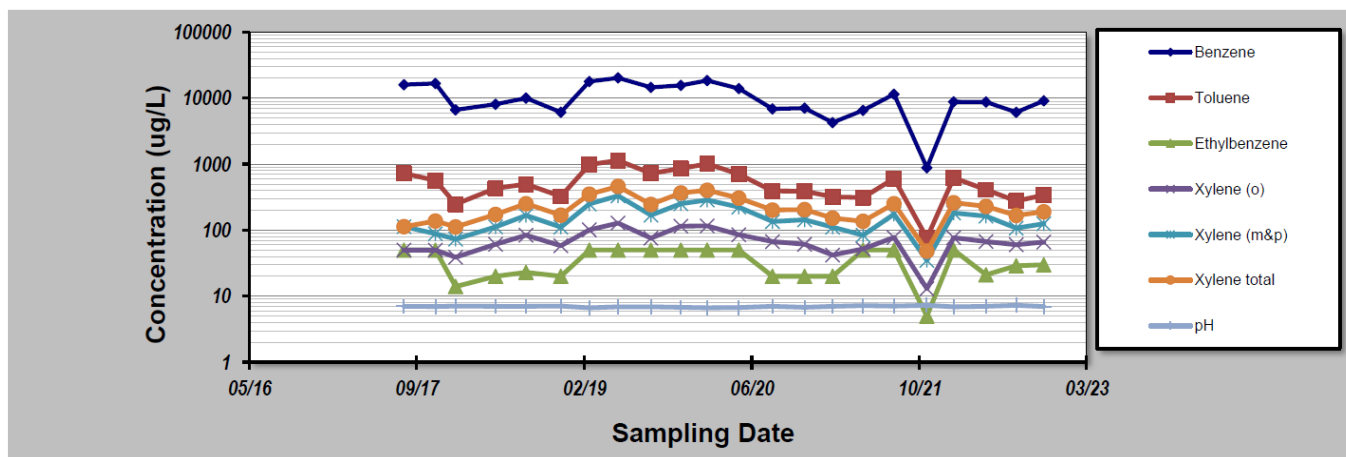


Figure 6.15 Statistical trend analysis of MW08– BTEX and pH (reference AECOM 2022d)

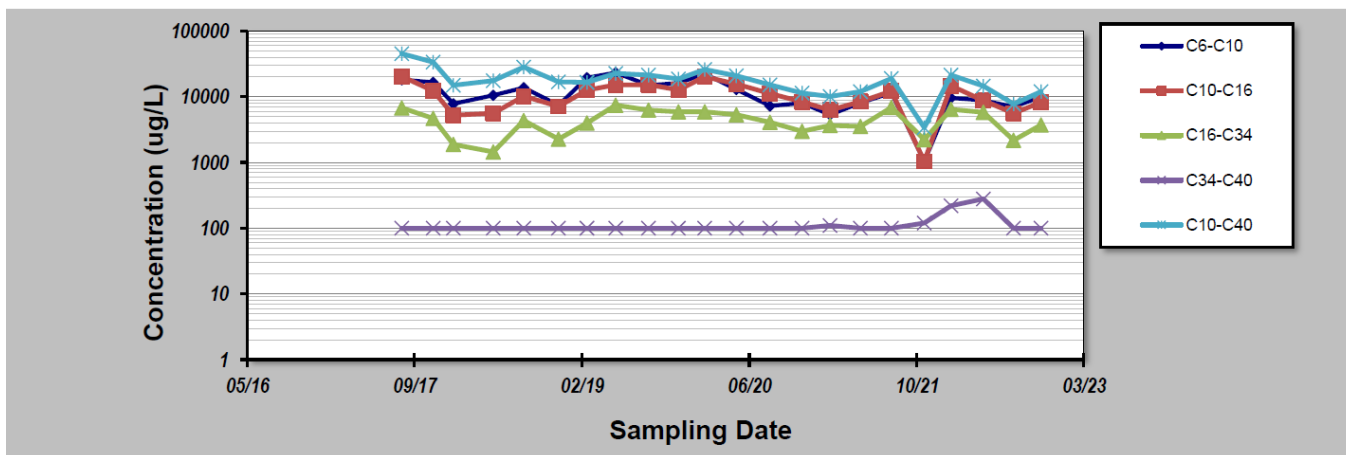


Figure 6.16 Statistical trend analysis of MW08 – TRH (reference AECOM 2022d)

### 6.1.9 MW09

Recorded pH levels at MW09 for this reporting period ranged from 7.09 to 7.44 and were slightly below the previously detected range at this location. Mann Kendall trend analysis reported no trend in pH levels.

BTEX concentrations remained below the LOR throughout the 2022 monitoring period, consistent with previous concentrations. Statistical analysis reported a stable trend of BTEX concentrations.

TRH concentrations remained below the LOR throughout the 2022 monitoring period, consistent with all previous concentrations. Statistical analysis reported a stable trend for all TRH fractions.

Concentrations of TRH have been reported consistently less than the LOR since commencement of quarterly monitoring, with the exception of:

- Concentrations of TRH >C<sub>16</sub>-C<sub>34</sub> fraction recorded at MW09 (120 µg/L in) January and May 2018, (150 µg/L in) February 2020, and (180 µg/L in) May 2020.

The statistical trend analyses for MW09 are presented in Figure 6.17 and Figure 6.18.

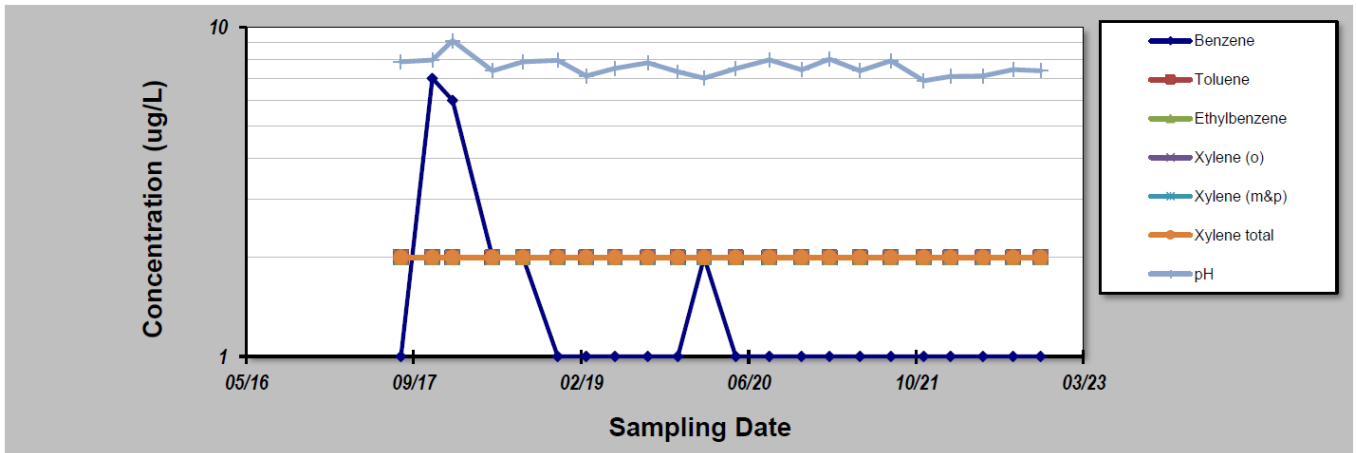


Figure 6.17 Statistical trend analysis of MW09– BTEX and pH (reference AECOM 2022d)

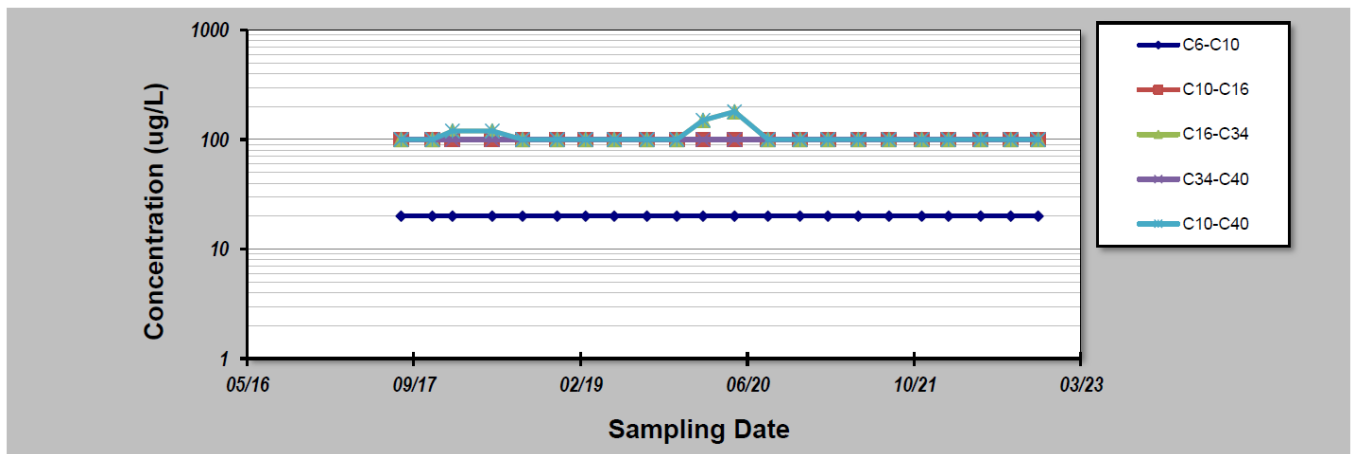


Figure 6.18 Statistical trend analysis of MW09 – TRH (reference AECOM 2022d)

### 6.1.10 Summary of groundwater results

Nine groundwater wells were sampled in accordance with the site’s EPL.

Groundwater level monitoring and groundwater sampling was conducted at the Current Site Area (MW01 to MW04 – see Figure 2) and the Approved Expansion Area (MW05 to MW09 – see Figure 2) on 7 and 15 November 2022 in accordance with the Site’s EPL. Due to the viscosity of the “coal tar”-like product the IP was unable to proceed through the DNAPL to determine an accurate depth at MW08.

The analytical results of the groundwater quality monitoring at the Site reported no exceedances of the adopted GAC at groundwater wells MW01, MW02, MW03, MW04, MW05, MW06, MW07 and MW09.

Review of analytical results and MKA indicated results are generally consistent with historical data and confirmed that groundwater quality from this GME is comparable to pre-operational baseline conditions at the Site. It is considered that Site operations have not had any measurable impact on the quality of groundwater beneath the Site. Overall, it is considered that Stolthaven has complied with the groundwater monitoring requirements of the EPL and GMP.

As at this GME, 39 rounds of baseline groundwater monitoring have been undertaken on monitoring wells MW01 to MW04 at the Current Site Area. Baseline analytical results have identified levels of TRH and BTEX were consistently below the limit of reporting.

As at this GME, 22 rounds of baseline groundwater monitoring have been undertaken on monitoring wells MW05 to MW09 at the Approved Expansion Area. Baseline analytical results have identified consistent exceedances of the adopted GAC for ethylbenzene and ortho, meta and para xylenes and elevated TRH concentrations at groundwater well MW08. It is considered residual hydrocarbon impacts identified at MW08 are localised within fill deposits immediately surrounding MW08 and are effectively laterally delineated to the north-east and south by MW08A and MW08B.

To date, no infrastructure related to storage and transfer of hydrocarbons is in place at the Approved Expansion Area. It is considered that the elevated results are related to residual historical contamination from the former BHP Steelworks (which previously occupied areas of the Current Site Area and Approved Expansion Area) and are unrelated to current operations at the Site.

# 7. Stormwater

## 7.1 Stormwater monitoring

Monitoring of stormwater discharges is undertaken as part of the Site's Stormwater Management Plan (SWMP) to assess the effectiveness of stormwater runoff quality controls implemented at the site. Monitoring of stormwater at the site consists of:

- Visual inspection of the site and areas receiving runoff from the site
- Monitoring water quality following rainfall events

Indicators of potential adverse water quality impacts include:

- Evidence of erosion and scouring around the stormwater pipe discharge outlets
- Changes in clarity, colour and odour of receiving waters
- Presence of debris and rubbish
- Evidence of stress on flora or fauna
- Presence of an oily film on water surfaces
- Orange/brown coating on banks, water surfaces or substrate

There are currently nine concrete bund walls around the site's bulk storage area designed to contain any spills onsite and prevent environmental harm. The bunds are referred to as Bund 1, Bund 2, Bund 3, Bund 5, Bund 6, Bund 7, Bund 8 and Bund 9. After every rainfall event all bunds are sampled and tested before release through the Puraceptor on site according to the SWMP. In order to ensure the quality of stormwater collected from the bunds, the outlet from the bunds is kept closed at all times.

The Puraceptor is a water quality and hydrocarbon detector located prior to the discharge point at the Hunter River. In order to confirm that stormwater measures implemented at the site do not adversely impact on the Hunter River, samples are collected following rainfall events that result in sufficient stormwater discharge to collect surface water samples.

The water samples at EPL Point 5 are analysed prior to discharge for the pollutants as shown in Table 7.1. Concentration limits are taken from EPL 20193. Once water quality results are obtained for the water in the Point 5 pit, water is discharged into the Hunter River via the Puraceptor. If water quality is found to be noncompliant with the parameters prescribed in the site's EPL it is retested and if the results are above prescribed limits again a licenced trade waste contractor is engaged to dispose of the waste water. Further details of waste water removed from site by the licenced waste contractor is presented in Section 10.1. It is noted that Biological Oxygen Demand (BOD) was removed from the EPL criteria on 27 August 2015 and was not sampled between the 2017 and 2022 reporting periods.

**Table 7.1** Water quality criteria (EPL 20193)

Pollutant	Units of measure	Frequency	Method	100 percentile concentration limit
Dissolved oxygen	mg/L	Weekly during any discharge	Grab sample	>2
Oil and grease	mg/L	Weekly during any discharge	Grab sample	10
pH	pH units	Weekly during any discharge	Grab sample	6.5-8.5
Total suspended solids	mg/L	Weekly during any discharge	Grab sample	30

## 7.2 Stormwater monitoring results

Stolthaven conducted stormwater sampling onsite and provided the 2022 water quality results from the site's licenced discharge point which are presented in Table 7.2 below. Water quality results from bund water sampling are presented in Table 7.3. A full copy of the data from stormwater monitoring is provided in Appendix C.

Table 7.2 Discharged water quality results (EPA Point 5)

Sample Date	Dissolved oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS) (mg/L)	Volume discharged (L)
6/01/2022	7.10	< 2	7.43	8	20,000
17/01/2022	7.38	< 2	7.17	6	25,000
14/02/2022	7.00	< 2	7.02	5	35,000
1/03/2022	8.20	< 2	7.57	26	35,000
3/07/2022	6.80	< 2	7.44	9	35,000
22/03/2022	8.40	< 2	7.73	5	5,000
28/03/2022	8.00	< 2	7.24	5	35,000
4/08/2022	8.20	< 2	7.30	5	30,000
26/04/2022	8.20	< 2	7.37	5	30,000
4/10/2022	7.20	< 2	7.85	11	25,000
26/04/2022	8.20	< 2	7.37	5	30,000
5/10/2022	7.20	< 2	7.85	11	30,000
24/05/2022	8.80	< 2	7.56	9	30,000
6/06/2022	8.30	< 2	7.54	5	30,000
20/06/2022	7.80	< 2	7.45	17	30,000
28/06/2022	7.20	< 2	6.85	5	30,000
7/04/2022	9.50	< 2	7.32	10	30,000
7/11/2022	10.90	< 2	7.42	20	30,000
20/07/2022	9.00	< 2	7.52	31	0
25/07/2022	7.40	< 2	7.65	13	25,000 <sup>1</sup>
8/08/2022	7.00	4	7.66	9	25,000
25/08/2022	7.00	< 2	7.17	21	25,000
9/01/2022	8.00	< 2	7.61	16	20,000
9/05/2022	8.60	< 2	7.50	6	20,000
16/09/2022	6.80	< 2	7.38	22	20,000
26/09/2022	8.60	< 2	8.03	17	20,000
10/06/2022	7.60	< 2	7.28	27	35,000
21/10/2022	7.90	< 2	7.46	8	35,000
11/08/2022	8.50	< 2	7.17	5	15,000
14/11/2022	6.80	< 2	7.58	9	15,000
28/11/2022	4.70	< 2	7.82	10	15,000



Sample Date	Dissolved oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS) (mg/L)	Volume discharged (L)
19/12/2022	7.00	< 2	7.84	5	15,000
Minimum	4.70	< 2	6.85	5	-
Maximum	10.90	4	8.03	<b>31</b>	-
Average	7.79	4	7.47	11.44	-

**BOLD** denotes an exceedance of the criteria

<sup>1</sup> Indicates a resample and retest was subsequently taken

Where exceedances occurred (bold items in Table 7.2), bund water was re-tested, the results of the retest are indicated in the row below the bold results. All retested results met the EPA's criteria for discharge from site. This process is undertaken in accordance with the sites Stormwater Management Plan.

Table 7.3 Bund water quality results

Parameter	Minimum	Maximum	Average
pH	6.48	8.5	7.53
Total dissolved solids (ppm)	12.2	66.7	37.89
Dissolved oxygen (mg/L)	31.3	121.4	62.85
Conductivity (µS/cm)	19.8	78.3	42.3

## 7.3 Analysis of results

### 7.3.1 Discharged water quality results

While the water sampling identified one exceedance of the EPA criteria, any water which exceeded EPA criteria (20 July 2022) was not discharged & subsequently resampled. Further sampling & testing provided acceptable results and discharges are then permitted. The site's Stormwater Management Plan states *"If laboratory analysis of the water samples failed against EPL limits, a resample will be taken and tested. If the second analysis fails, then effluent will be disposed off-site by approved waste disposal contractor & reported through the sites Incident management system."*

During the 2022 monitoring period, all water discharged from the site was compliant with all conditions of the site's EPL. The following sections discusses each analyte further, with reference to trends identified in AECOM 2022.

#### Dissolved Oxygen (DO)

The DO concentrations reported at Monitoring Point 5 complied with the site's EPL criteria, with all results above the prescribed minimum concentration limit of 2 mg/L. No exceedances of the criteria were recorded during the reporting period. The average dissolved oxygen level recorded during the 2022 reporting year was 7.79 mg/L, with a minimum level of 4.70 mg/L and a maximum of 10.90 mg/L. AECOM 2022 presented a trend plot of dissolved oxygen data between 2014 and 2018 which showed DO concentrations have been variable at Monitoring Point 5 with no obvious trends. Data reported during 2022 confirmed the variability of DO with no obvious trends.

#### Oil and grease

The oil and grease levels recorded at Monitoring Point 5 during the reporting period were compliant with the EPL concentration limit of 10 mg/L. There were no exceedances of the criterion recorded during the 2022 reporting period. The average level of oil and grease recorded during the reporting period was 4.0 mg/L, with a maximum of 4.0 mg/L.

## pH

The pH levels recorded at Monitoring Point 5 complied with the site's EPL criteria, remaining within the prescribed pH range of 6.5 – 8.5. There were no exceedances of the criterion recorded during the 2022 reporting period. During the reporting period, the average pH level was 7.47 with a minimum of 6.85 and a maximum of 8.03. AECOM 2019 presented a trend plot of pH results between 2014 and 2018 which, along with results from 2019, 2020, 2021 and 2022, indicate that pH levels at Monitoring Point 5 generally remain within the range of 6.5 to 8.5.

### Total Suspended Solids (TSS)

Concentrations of TSS recorded at Monitoring Point 5 varied throughout the reporting period. There was one occurrence where TSS were recorded to be above the maximum criteria. The exceedance was recorded on 20 July 2022. Water was not released and was instead held and resampled as per the site's Stormwater Management Plan.

During the reporting period, the average level of total suspended solids was 11.44 mg/L, with a minimum of 5 mg/L and a maximum recording of 31 mg/L. AECOM 2019 presented a trend plot of TSS results between 2014 and 2018. The historical and current results indicate that the level of TSS at Monitoring Point 5 is variable, with no obvious trends identified.

## 7.3.2 Bund water quality results

There are no specific limits set for bund water quality. Bund water is sampled following rainfall and then released according to the site's Stormwater Water Management procedure through the site's Purceptor to the Western channel.

The following sections discuss each analyte further, with reference to trends identified in AECOM 2022. In future reporting periods, the data series will grow in accuracy and bund water quality trend analysis can be undertaken. Appropriate management measures can be recommended to address any issues identified.

### pH

The pH levels recorded in the bund water during the reporting period ranged from 6.48 to 8.5 with an average of 7.53. The pH levels during the reporting period were generally within the pH range of 6.5 – 8.5 prescribed in EPL criteria for the licensed discharge point (Monitoring Point 5), however there were periods of lower criteria exceedances. The pH of the bund water was lower than 6.5 on the following occasion:

- 4 July 2022 within Bund 9 (6.48).

The pH of the bund water was recorded as being 8.5 at Bund 1 on 20 June 2022 but was not higher than 8.5 on any occasion during the 2022 reporting period.

Results from 2022 were within historical concentrations and are not indicative of any obvious trends.

### Total Dissolved Solids (TDS)

TDS levels in bund water during the reporting period ranged from 12.2 to 66.7 ppm, with an average of 37.89 ppm. TDS levels at the site during the reporting period were slightly lower than in the previous reporting period but were broadly consistent with historical concentrations which have been relatively stable between 0 and 100 ppm. During the reporting period, there were no samples recorded at a higher level than 100 ppm. AECOM 2019 presented a trend analysis of TDS concentrations between 2014 and 2018 indicating that there could be a decreasing trend. Results from 2019, 2020, 2021 and 2022 confirm this observation.

### Dissolved Oxygen (DO)

DO Concentrations ranged from 31.3 mg/L to 121.4 mg/L, with an average concentration of 62.85 mg/L. AECOM 2019 presented a DO trend plot of concentrations between 2014 and 2018 which showed an increasing linear trend throughout the 2018 period. DO concentrations during the 2019, 2020, 2021 and 2022 monitoring periods did not confirm this trend with concentrations appearing to be variable.

## **Conductivity**

Conductivity levels in bund water during the reporting period ranged from 19.8 to 78.3  $\mu\text{S}/\text{cm}$ , with an average conductivity of 42.30  $\mu\text{S}/\text{cm}$ . AECOM 2019 presented a conductivity trend plot of concentrations between 2014 and 2018 which indicated a decreasing linear trend was identified. Concentrations reported in 2022 confirm the possibility of a decreasing trend, with reported concentrations being lower than those reported in 2021. This decreasing trend is not a concern and possibly attributed to periods of heavy rainfall introducing fresh water into the system.

## **7.4 Summary of stormwater results**

Stormwater management and monitoring measures implemented at the site have been successful in preventing environmental damage in this reporting period. Sampling identified one pH exceedance of the EPL. The pH exceedance is thought to be attributed to the low levels during sampling.

Consistent future monitoring of bund water after rainfall events will improve the site's available baseline data and ability to identify trends and issues as well as to identify necessary environmental management measures to improve the environmental performance of the site.

## 8. Noise

### 8.1 Operational noise

Operational noise generation is managed and monitored according to the Site's Noise Management Plan. Up until 2018, ships would dock at M4 and pump fuel into the storage tanks. Mayfield No. 7 Berth was commissioned within the 2018 reporting period and now services the facility for the import and export of petroleum products. Discussions between Stolthaven and NSW EPA (email dated 20 December 2018) confirmed that shipping activities associated with Mayfield No. 7 Berth are not required to be included as part of the facility's operational noise compliance assessments. Further, as per Condition 1.6 of the MCP, noise emissions associated with the berths, berthing or harbour operations (i.e. shipping activities) are excluded from contributing to the overall MCP noise emissions.

The main noise sources from AECOM 2022 at the site are summarised in Table 8.1.

Table 8.1 Noise emitters at the site

Operational Activity	Noise Source
Internal private access roads	Moving trucks, idling trucks
Industrial Noise Sources*	Fuel pumps
	Haulage tanker trucks filling

\*Ships in berth and transferring fuel fall under the provisions of DA-293-08-00 as modified.

AECOM 2020 reported that Stolthaven received correspondence from NSW EPA, PON and DPE that noise generated from Steelworks Road operational activities (i.e. fuel truck movements) do not form part of the facility's operational activities. Therefore, fuel truck movements are no longer considered as part of the operational noise compliance assessments.

The nearest residential areas to the site are located to the south-west of the facility at Mayfield, with the closest receivers in Crebert Street, approximately 900 m away. To the south east there are residential receivers located in Carrington, approximately 2 km away, and residential receivers located in Stockton, approximately 3 km away.

Operational noise levels at the site are required to be within limits set out in Condition L5.1 of EPL 20193 and Condition 30 of SSD\_7065. The operational noise criteria that have to be met as prescribed by the EPL are shown in Table 8.2.

Table 8.2 Operational noise criteria

Receiver	Location	Operational noise limits, db(A)			
		Day	Evening	Night	
		L <sub>Aeq, 15 min</sub>	L <sub>Aeq, 15 min</sub>	L <sub>Aeq, 15 min</sub>	L <sub>Aeq, 1 min</sub>
R1	1 Arthur St, Mayfield	35	35	35	45
R2	52 Arthur St, Mayfield	35	35	35	48
R3	2 Crebert St, Mayfield	41	41	41	49
R4	21 Crebert St, Mayfield	40	40	40	47
R5	24 Crebert St, Mayfield	42	42	42	51
R6	30 Crebert St, Mayfield	41	41	41	50
R7	50 Crebert St, Mayfield	35	35	35	50
R8	2 McNeil Cl, Mayfield	35	35	35	48

The SSD\_7065 consent requires operational noise levels at the site to comply with the relevant noise goals contained in the Mayfield Concept Plan MP09\_0096, or any noise quota established by the PON for the development. A methodology to deal with cumulative noise from the entire Mayfield Concept Plan (MCP) was developed by PON.

The MCP overall noise goals are presented in Table 8.3.

**Table 8.3** MCP overall noise goals

Receiver	MCP Project specific noise goals, $L_{Aeq, period}$ dB(A)		
	Day (7:00 am to 6:00 pm)	Evening (6:00 pm to 10:00 pm)	Night (10:00 pm to 7:00 am)
A – 1 Arthur St, Mayfield	47	36	30
B – 2 Crebert St, Mayfield	51	40	34
C – 32 Elizabeth St, Carrington	42	30	25
D – 186 Fullerton Rd, Stockton	39	28	22

The SSD\_7065 consent requires operational noise levels at the site to comply with the relevant noise goals in Conditions C30 and C31. The noise limits under C30 and C31 are the same as the noise limits in Condition L5 of EPL 20193. Noise quotas have been allocated to the site as part of Stolthaven Stage 3 SSD 7065 Environmental Impact Statement. As part of SSD 7065, two key conditions are relevant to this noise compliance assessment, these include Conditions 32 and C35, which specify:

- Condition 32: The Applicant shall:
  - Ensure noise from the site does not exceed the noise quotas provided by the PON in accordance with the Site Noise Mode.
  - Comply with the directions of the PON in relation to the management of noise from the site.
- Condition 35: The Applicant shall monitor noise from the site. The monitoring shall:
  - Be undertaken annually, or to address genuine noise complaints related to the site as determined by the Secretary, EPA or the PON.
  - Be undertaken in accordance with the NSW Industrial Noise Policy and the Noise Verification Monitoring Plan, October 2015 or its latest version.
  - Demonstrate compliance with the noise limits in this consent and the noise quotas provided by PON in accordance with the Mayfield Concept Plan.
  - Be reported annually to the Secretary, EPA and the PON.

Stolthaven Stage 3 SSD 7065 specific cumulative amenity noise quotas are presented in Table 8.4.

**Table 8.4** MCP overall noise goals – SSD 7065

Receiver	MCP Project specific noise goals, $L_{Aeq, period}$ dB(A)		
	Day (7:00 am to 6:00 pm)	Evening (6:00 pm to 10:00 pm)	Night (10:00 pm to 7:00 am)
A – 1 Arthur St, Mayfield	47	36	30
B – 2 Crebert St, Mayfield	51	40	34
C – 32 Elizabeth St, Carrington	42	30	25
D – 186 Fullerton Rd, Stockton	39	28	22

## 8.2 Noise monitoring results

Attended noise measurements were undertaken on 28 and 29 November 2022 at the closest nearby residential receiver locations as per the EPL 20193, SSD 7065 and MCP. Attended noise measurements were conducted using Brüel and Kjaer Type 2250 noise monitors.

At all measurement locations, the measured noise levels exceeded the noise limits. However, it was noted by AECOM 2022 that noise from the Stolthaven facility was not clearly distinguishable or quantifiable at any of the attended receiver locations.

During the attended measurements it was not possible to measurably distinguish the noise contribution from the facility from other industrial sources in the surrounding area at all receiver locations. Thus, it was not possible to determine the noise contribution through direct measurement.

The results of this assessment are provided in Table 8.5.

**Table 8.5** *Attended measurements at Assessment Receiver Locations between 28 and 29 November 2022*

Location		Time of Measurement	Monitored noise levels		
			L <sub>A1</sub> dB(A)	L <sub>Aeq</sub> dB(A)	L <sub>A90</sub> dB(A)
R1/A	1 Arthur St, Mayfield	29/11/2022 0:53 AM	35	43	32
R2	52 Arthur St, Mayfield	29/11/2022 1:11 AM	37	44	31
R3/B	2 Crebert St, Mayfield	28/11/2022 23:16 PM	53	65	39
R4	21 Crebert St, Mayfield	28/11/2022 22:56 PM	58	72	42
R5	24 Crebert St, Mayfield	28/11/2022 23:36 PM	40	50	36
R6	30 Crebert St, Mayfield	28/11/2022 23:56 PM	51	56	49
R7	50 Crebert St, Mayfield	29/11/2022 00:15 AM	37	44	33
R8	2 McNeil Cl, Mayfield	29/11/2022 00:34 AM	35	43	29
C	32 Elizabeth St, Carrington	28/11/2022 22:34 PM	47	57	32
D	186 Fullerton Rd, Stockton	28/11/2022 22:00 PM	59	73	37

Due to the existing noise level at the site, on-site measurements of individual plant items and typical operations were undertaken on 28 and 29 November 2022 at the facility and during previous compliance inspections. It was noted during all measurements that the specific noise source being measured was the dominant noise source throughout the measurement period.

Observations were made of the onsite operations, which have then been reviewed in conjunction with the facility operational data to model 'reasonable' worst case operational scenarios over the assessment periods. Key on-site attended measurement results are summarised in Table 8.6.

Table 8.6 On-site attended measurements at the facility on 29 November 2022

Operation	Time of measurement	Monitored noise levels			
		L <sub>A1(t)</sub> , dB(A)	L <sub>A10(t)</sub> , dB(A)	L <sub>Aeq(t)</sub> , dB(A)	L <sub>A90(t)</sub> , dB(A)
Truck idling	9:57 AM	75	85	76	70
Front gate buzzer	9:58 AM	74	79	77	70
Operating pump	10:01 AM	80	81	81	79
Exit gate buzzer	10:09 AM	81	85	84	77
Truck leaving site	10:13 AM	73	78	74	71
Truck leaving with buzzer	10:13 AM	74	78	77	69
Compressor 1m	10:17 AM	82	83	82	82
Air release valve	10:19 AM	80	83	83	64

Table 8.7 presents predicted noise level results for the reasonable worst case intrusiveness scenario (15 minute period) for neutral and adverse weather conditions.

Table 8.7 Predicted intrusive noise levels

Receiver	EPL 20193 and SSD 7065 Noise Limits, L <sub>Aeq, 15 min</sub> , dB(A) <sup>1</sup>	Predicted noise level, L <sub>Aeq, 15 min</sub> , dB(A)	
		Neutral weather	Adverse weather <sup>2</sup>
R1	35	14	19
R2	35	14	19
R3	41	24	29
R4	40	24	29
R5	42	23	28
R6	41	21	26
R7	35	17	22
R8	35	15	20

1. Operational noise limits are based on the most stringent operational noise limits (i.e. night-time period).

2. Adverse weather considers the worst case of 3 m/s source to receiver wind and temperature inversions.

The facility's predicted noise levels in Table 8.7 indicate that under neutral and adverse weather conditions, the facility complies with EPL 20193 and SSD\_7065 noise limits at all locations.

AECOM 2022 also prepared predicted modelled results to determine noise compliance against the EPL 20193 and SSD\_7065 sleep disturbance noise limits. The sound power levels for the maximum noise events at the facility are included in Table 8.8.

Table 8.8 Predicted Noise Levels – Sleep Disturbance Assessment, Night-time Period

Receiver	EPL 20193 and SSD 7065 Noise Limits, L <sub>Aeq, 15 min</sub> , dB(A)	Predicted noise level, L <sub>A1, 1 min</sub> , dB(A)		Compliance
		Neutral weather	Adverse weather <sup>1</sup>	
R1	45	26	31	Yes
R2	48	25	30	Yes
R3	49	33	36	Yes
R4	47	37	42	Yes
R5	51	34	37	Yes
R6	50	33	36	Yes

Receiver	EPL 20193 and SSD 7065 Noise Limits, L <sub>Aeq, 15 min</sub> , dB(A)	Predicted noise level, L <sub>A1, 1 min</sub> , dB(A)		Compliance
		Neutral weather	Adverse weather <sup>1</sup>	
R7	50	27	31	Yes
R8	48	26	31	Yes

<sup>1</sup> Adverse weather considers the worst case of 3 m/s source to receiver wind and temperature inversions.

The L<sub>A1, 1min</sub> night-time site operation assessment indicates that the predicted noise levels at all receiver locations comply with the EPL 20193 and SSD 7065 sleep disturbance noise limits during both neutral and adverse weather conditions.

AECOM 2022 also prepared predicted modelled results to determine noise compliance pertaining to fire pump testing. Condition L5.2 of EPL 20193 requires:

*Fire pumps at the premises must be designed and operated so that noise from routine testing or maintenance is not more than LAeq (15min) 53 dB(A) at the most affected residential or sensitive receiver. Routine testing or maintenance must only occur during the daytime.*

Fire pump testing results are outlined in Table 8.9.

**Table 8.9 Predicted Noise Levels – Fire pumps**

Receiver	EPL 20193 and SSD 7065 Noise Limits, L <sub>Aeq, 15 min</sub> , dB(A)	Predicted noise level, L <sub>A1, 1 min</sub> , dB(A)		Compliance
		Neutral weather	Adverse weather <sup>1</sup>	
R1	53	17	23	Yes
R2	53	18	23	Yes
R3	53	33	38	Yes
R4	53	40	45	Yes
R5	53	28	33	Yes
R6	53	24	29	Yes
R7	53	20	25	Yes
R8	53	19	24	Yes

The fire pump testing operational noise assessment indicates that the predicted noise levels at all receiver locations comply with the EPL 20193 and SSD 7065 noise limits during both neutral and adverse weather conditions.

## 8.3 Analysis of results

The AECOM (2022) noise assessment reported that during the attended measurements, it was not possible to directly quantify the impacts of noise arising from operations at the facility due to the influence from extraneous noise sources. As such, an alternative method was required in order to demonstrate compliance with the project approval requirements. Compliance was found against the requirements of all site approval documents, at all receiver locations, during all assessment periods under all prevailing meteorological conditions.

A Noise and Vibration Impacts Assessment was prepared as part of the Environmental Impact Statement (EIS) for the SSD\_7065 development consent application to increase throughput to 3,500 ML per year. Noise modelling was undertaken to examine the noise and vibration impacts of the construction and operational phases of the project, as well as the cumulative impacts which may result from each phase of the proposed facility. The assessment concluded that there would be no exceedance of the noise criteria under all operational scenarios, for day and night activities. The results of noise modelling undertaken during this reporting period indicate that the site is operating in accordance with the predictions made in the EIS.

Results of the noise compliance modelling showed that the operation of the facility complies with the noise limits stated in EPL 20193 and SSD\_7065, in addition to the project specific noise goals in the MCP for all outlined receivers.



## 9. Fuel storage and transport

### 9.1 Fuel storage

Approximately 964 ML of fuel (including additive) was received on site and 1,002 ML of fuel (including additive) was transported off site during the reporting period. A breakdown of fuel stored, received, and dispatched is provided in Table 9.1. The combined volume of fuel initially stored at the start of the reporting period plus the volume of fuel received during the reporting period should approximately equal the combined volume of fuel dispatched throughout the reporting period plus the volume of fuel stored at the end of the reporting period. It should be noted however that site measurement equipment has a tolerance of 0.2% which over the course of a year can lead to these amounts not matching. Other factors that contribute to the discrepancy include:

- Product volume onsite is accounted for by a daily and monthly reconciliation process.
- Some variation is caused by the heating and cooling of products being received and the temperature and therefore density at the different times of measurement/pumping.
- Bulk tanks are manually dipped by a third party surveyor before and after every shipping receipt.
- Gantry meters are calibrated on a 6 monthly schedule to minimise potential for measurement errors.

**Table 9.1** Volume of fuel stored, received and dispatched

Fuel type	Volume stored (at start of reporting period)	Volume received (during reporting period)	Volume dispatched (during reporting period)	Volume stored (at end of reporting period)
Diesel (L)	93,850,420	964,064,443	1,002,612,229	55,962,497
Biodiesel (L)	0	0	0	0
Additive (L)	8828	0	Note 2	5,758
Slops (L)	5924	Note 1	306,885	7,247
TOTAL (L)	93,865,172	964,064,443	1,002,919,114	55,975,502

Note 1 – Slops are generated onsite and not imported

Note 2 – Additives are mixed with diesels for export and note exported separately

\*Includes additives

The annual throughput approved under SSD\_6664 was increased via modification from 1,010 ML to 1,300 ML on 28 September 2015. The annual throughput approved under the EPL was amended on 2 October 2015 with the current annual throughput limit approved under Condition A1.4 of the EPL being 1,300 ML. More recently, the EPL was amended on 27 August 2021, with no change to throughout limit. More detail about the EPL is provided in Section 2.6.4. The annual throughput will not be increased up to 3,500 ML until the remaining features approved under SSD\_7065 have been constructed and are operational.

No exceedances of throughput limits occurred during the reporting period.

### 9.2 Truck movements

Over the reporting period there were a total of 39,506 trucks at an average of approximately 3,292 each month. This equates to approximately 108 truck movements per day. A breakdown of hourly truck movements is provided at Appendix D. Note these are recorded as one truck only, so figures need to be doubled for total number of truck movements as one truck entering the site equals one movement and the same truck leaving the site is counted as one movement.

A Traffic Impact Assessment (TIA) was conducted as part of the EIS for the SSD\_7065 application to increase throughput to 3,500 ML per year. The TIA assessed a worst case potential operational traffic scenario of 200 truck movements per day. Although there are no specific traffic movement requirements in either the Project approval or EPL, assessment of average daily truck movements at the site for this reporting period indicates compliance with this predicted traffic volume for all months.

## 9.2.1 Mayfield concept plan traffic movements

Condition 2.3 of the Mayfield Concept Plan Approval provides that the following truck numbers should not be exceeded prior to additional traffic monitoring being undertaken and any potential impacts to the road networks operation of infrastructure requirements identified:

- Total Mayfield Concept Plan Truck Movements per day – 1,268
- Total Mayfield Concept Plan Truck Movements per hour – 95

During the busiest month of operations throughout the review period (December 2022), movements from Stolthaven averaged up to 141 movements per day which is within the Concept Plan's limits listed above. Stolthaven truck movements have shown a general decline since 2015 which recorded the highest number of truck movements to date. Activities which have the potential to generate additional heavy vehicle movement from the wider Mayfield Concept Plan site include Mayfield Berth 4 operations. These have remained at similar levels of operation since the facility began operation and there has been no other new additional land uses in the Concept Plan area which have the potential to generate cumulative heavy vehicle movements above the daily or hourly thresholds in the Concept Plan approval. In 2022 PON introduced mobile harbour cranes to assist with the more movement of cargo across Mayfield Berth 4 operations. It is understood that these cranes will improve cargo movement efficiency and cargo handling ability (for example improved handling of larger or awkward project cargos) and are not linked to significant changes in vehicles movements.

# 10. Waste

Waste is managed according to the Site's Waste Management Plan (WMP) and is minimised or recycled where possible. Solid waste is disposed of in appropriate receptacles and removed by local waste contractors.

Liquid waste generated on site is stored in the tanks listed in Table 2.3. Waste is discharged from the site once it has been treated to an acceptable quality or is disposed of by an appropriately licenced waste collector.

Waste levels have a fairly steady trend with the data obtained. General waste bin pick ups have increased in 2022, due to more waste generated from higher terminal throughputs. Garnet waste recorded in 2021 and 2022 and is expected again in 2023 with NN2 and NN3 requiring similar floor repair works.

No further recycling opportunities were identified in 2022.

Waste removed from the site in the current reporting period is presented in Appendix H with the following amounts disposed:

## **Effluent Waste**

- Terminal Effluent: 38,100 L (disposed at Cleanaway)
- Mayfield 7 Quantity: 11,300 L (disposed at Cleanaway)
- Terminal Effluent: 92,500 L (disposed at Veolia)
- Mayfield 7 Quantity: 29,500 L (disposed at Veolia)

## **Hazardous Waste (Liquid)**

- Quantity (Veolia): 22,820 L
- Transfers (JLP Transfer): 302,065 L

## **Solid Waste**

- 660 L Bins: 10
- 20 L Drums: 18
- 200 L Drums: 19
- 1,100 L Drums: 8

## **General – Recycled and Green Waste**

- General Waste: 67.5m<sup>3</sup>
- Recycling: 25.3 m<sup>3</sup>
- Printer Cartridge Recycling: 0 x 16 kg cartridge
- Other: 19.8 kg (spent garnet from NN2 floor blast, Veolia Grit disposal, non-hazardous and no lead).

## 10.1 Spills and site contamination

Records of reportable spills and site contamination are described in the incident register provided in Appendix E. Following incidents, Stolthaven prepares an Incident Report in accordance with their internal Incident Investigation procedure. These reports are saved against the incident in the Incident Register (EcoPortal).

All incidents recorded during the reporting period were considered minor in severity ranking and were effectively managed on the site. Details of minor incidents are provided in Appendix E.

# 11. Aesthetic

Weed control and vegetation management activities are conducted monthly according to the site's maintenance checklist and in accordance with the Site's Landscape Management Plan. These controls ensure fire and safety risks are managed effectively at the site through the prevention of any vegetation build-up. No complaints were received by Stolthaven regarding aesthetic issues at the site during the 2022 monitoring period.

## **12. Community engagement and complaints**

### **12.1 Community engagement**

Stolthaven undertook ongoing community engagement through attendance and active engagement in the Port of Newcastle Community Liaison group meetings on the following dates during the reporting period:

- 15 March
- 23 August
- 22 November
- Stolthaven also has a Stolthaven Community Group, which met on the following dates:
- 24 May
- 15 November

Stolthaven was not the subject of any concerns raised by community members during engagement activities in 2022.

### **12.2 Complaints**

No complaints were received by Stolthaven during the reporting period.

# 13. Compliance

One non-compliance was identified during the reporting period.

The onsite weather station sensor failed which impacted wind speed and direction readings from 31 August 2022. The site had access to the neighbouring Mayfield 4 weather station and reports during this period.

The replacement part has significant lead time as a result of international supply chain constraints and is due for delivery to site in January 2023. The site has ordered a different weather station replacement which will enable better service support and parts supply in the future.

## 13.1 Statement of compliance

One non-compliance was reported for the reporting period. This non-compliance is detailed above in Section 13. Other conditions specified in SSD\_7065 have been met during the reporting period.

## 13.2 Complaint trending

The historical complaints received by Stolthaven due to their operations are presented in Table 13.1. Since site operations began in November 2013, Stolthaven have not received any complaints.

Table 13.1 Complaints received

Reporting period	Number of complaints
2014	0
2015	0
2016	0
2017	0
2018	0
2019	0
2020	0
2021	0
2022	0

## 13.3 Pipeline integrity

An Annual Pipeline Pressure Test was conducted at the Stolthaven Terminal on the wharf pipeline on 26 October 2022 by Hancock & Owen Services Pty Ltd. The test confirmed the integrity of the pipeline. A copy of the test report is included in Appendix G.

In addition, leak testing is performed prior to each ship discharge operation in accordance with EPL condition O7.2.

During a pre-discharge leak test on 12 December 2022, four leaks were located. A 1.5 hour delay resulted as rectifications were carried out. Further details are provided in the incident register in Appendix E.

## 13.4 Independent environmental audit

In accordance with the facilities auditing schedule under the development consent, an IEA was undertaken for the facility during this reporting period. The IEA was completed and issued on 28 April 2022. A summary of the outcomes and recommendation from the IEA are provided in Table 13.2.

Table 13.2 IEA Recommendations

Condition	Recommendation	Response	Update
SSD 7065 – B2	Include a description of the complaints management in the LMP at the next update or reference to the procedure in the Environmental Management Plan.	The Stolthaven Landscape Management Plan was amended to include complaints management. Submitted to DPE 06 July 2022.	Action complete
SSD7065 – D7	Include a description of the complaints management in the LMP at the next update or reference to the procedure in the Environmental Management Plan.	As above	Action complete
SSD 6664 – 2-2	Undertake a review of the SWMP prior to commencement of further works under SSD 7065 to ensure it is consistent with the <i>Managing Urban Stormwater</i> Guidelines, including the addition of figures where relevant.	Noted, plan to be reviewed prior to commencement of further works under SSD 7065.	Action remains open
SSD 6664 – 4-2	Given the results of the groundwater monitoring as described in Section 3.6.1, it is recommended that the WMP is updated in consultation with the Site Auditor and the PON to include specific triggers for pH (time and/or value based) that clearly define when further investigations or actions are required.	Stolthaven has reviewed the recommendation in consultation with AECOM, the Site Auditor & Port of Newcastle. The site's operation has no material impact on pH levels in ground water. The site will seek an EPL variation/approval to remove pH testing from Groundwater testing criteria, planned in Q2 2022.	After further discussions with the EPA, it was established that pH monitoring for the site's operation was not assessable as the site has no impact on the groundwater monitoring pH. However, pH testing will remain in the site's EPL for the purpose of the monitoring the greater Mayfield area. pH monitoring will continue in accordance with the site's EPL without specific triggers - action to be closed in March 2023.

## 13.5 Actions required from previous annual review

Under the provisions of Schedule B condition B4 of the consent, actions from the previous Annual Review are presented below in Table 13.3.

A DPE letter from 05/04/2022 identified actions required to be completed for the 2022 Annual Review. Correspondence received from DPE is attached in Appendix B.

Table 13.3 Actions identified in DPE letter

Action identified	Where addressed
Figure 3 is not referenced in the 2021 report	See updated figures in Appendix A
Figures are required to show "Current Site Area" and "Proposed Expansion Area"	
Figure 2 and 3 labels require updating	
The "proposed terminal boundary" in Figure 2 and Figure 3 needs to be consistent	
Proposed vs actual infrastructure across all figures needs to be clarified	
Appendix A figures require updating to include reference to base map used, consent boundary, "Current Site Area", "Proposed Expansion Area", Actual infrastructure and Proposed infrastructure	

## 13.6 Cautions, warning letters, penalty notices or prosecution proceedings

No cautions, warning letters, penalty notices or prosecution proceedings occurred during the reporting period.



# 14. Conclusion and recommendations

The Annual Review has shown that the data collected and reviewed for the 2022 monitoring period is acceptable and in accordance with the SSD\_7065 consent and the site Operational Environmental Management Plan. This level of environmental performance can be attributed to the design and operation of the facility as well as to the environmental management plans and measures undertaken at the site.

Monitoring data collected and analysed during this reporting period has been analysed against baseline monitoring data for the site. The dataset for groundwater wells in the initial area (MW01 to MW04) have a dataset from nine years of quarterly monitoring, however the dataset for the wells in the expansion area is still relatively smaller (5 full years of quarterly monitoring). In future reporting periods as the amount of monitoring data available for analysis increases, trends in monitoring data will be able to be identified with greater confidence. Trends identified in the expansion area will need to be further reviewed in future in order to confirm the trends and determine the potential environmental management actions from Stolthaven for the site.

Some decreasing trends were identified for pH levels, including a decreasing trend at MW01, MW02, MW03 and MW04, however pH concentrations remained within background concentrations. These decreasing trends are not considered to be an issue at this stage, but will be reviewed in the next monitoring period.

MW05, MW06, MW07 and MW09 all exhibited no trend in pH levels and recordings varied slightly from previous readings.

The groundwater monitoring network was expanded in the fourth quarter of 2017 to provide monitoring of the Approved Expansion Area as described in SSD\_7065. At present the additional wells (MW05-MW09) have been assessed against background concentrations for the site, however background concentrations for the Expansion Area will be generated for future comparison. Elevated concentrations of TRH and BTEX above GAC (i.e. exceedances of the assessment criteria or background concentrations) were reported at MW08, consistent with previous monitoring rounds. Concentrations at MW08 will be closely monitored by future GME's, particularly given the continued significantly increasing trend of xylene concentrations. CoPC detected at MW08 are inferred to be residual contamination impacts believed to be associated with the remediation of the former BHP Steelworks site and unrelated to Stolthaven operations. Notwithstanding, the elevated CoPC concentrations reported at MW08 appear localised to this monitoring location.

Additional investigations undertaken during the 2018 monitoring period in the areas upgradient and downgradient of MW08 (MW08A and MW08B) indicated that the hydrocarbon impacts at MW08 are localised within fill deposits immediately surrounding MW08 and have been effectively delineated to the north-east and south. These additional wells were not monitored during the 2022 monitoring period and are expected to be decommissioned during development of the Approved Expansion Area which is currently vacant land. If increasing trends continue to be reported at MW08 in future rounds, further investigations may be required.

Stormwater management and monitoring measures implemented at the site have been successful in preventing environmental damage in this reporting period. All stormwater discharged from the site was compliant with the requirements of EPL 20193. Consistent future monitoring of bund water after rainfall events will improve the site's available baseline data and ability to identify trends and issues as well as to identify necessary environmental management measures to improve the environmental performance of the site.

Noise monitoring identified compliance with all site approval documents at all receiver locations. Truck movements during the reporting period remain well below the MCP limits and have shown a decrease since 2015.

# 15. References

AECOM (2019), Annual Review – 2018, Stolthaven Bulk Fuel Storage Facility, Mayfield, Rev 1, dated 26 February 2019.

AECOM (2022a), Quarterly Groundwater Monitoring Report, Mayfield Bulk Fuel Storage Facility, Q1 February 2022, dated 4 March 2022.

AECOM (2022b), Quarterly Groundwater Monitoring Report, Mayfield Bulk Fuel Storage Facility, Q2 May 2022, dated 1 June 2022.

AECOM (2022c), Quarterly Groundwater Monitoring Report, Mayfield Bulk Fuel Storage Facility, Q3 August 2022, dated 30 August 2022.

AECOM (2022d), Quarterly Groundwater Monitoring Report, Mayfield Bulk Fuel Storage Facility, Q4 November 2022, dated 5 December 2022.

AECOM (2022), Stolthaven Bulk Liquids Fuel Storage Facility, Mayfield, Operational Noise Compliance Assessment (2022), doc no. 60326869-RPNV-11\_0, dated 20 December 2022.

ANZG 2018, *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*. Australian and New Zealand Governments and Australian state and territory governments, Canberra ACT, Australia.

Australian and New Zealand Environmental Conservation Council (ANZECC & ARMCANZ 2000) *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*.

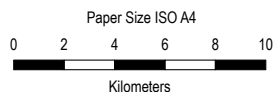
GHD (2022), Stolthaven Bulk Fuel Storage Facility, Mayfield, Annual Review 2021, dated February 2022.

NEPC (2013) National Environment Protection (Assessment of Site Contamination) Amended Measure (NEPM) No. 1 – Schedule B1, Guideline on Investigation Levels for Soil and Groundwater.

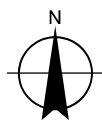
# Appendices

# Appendix A

## Figures



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 56



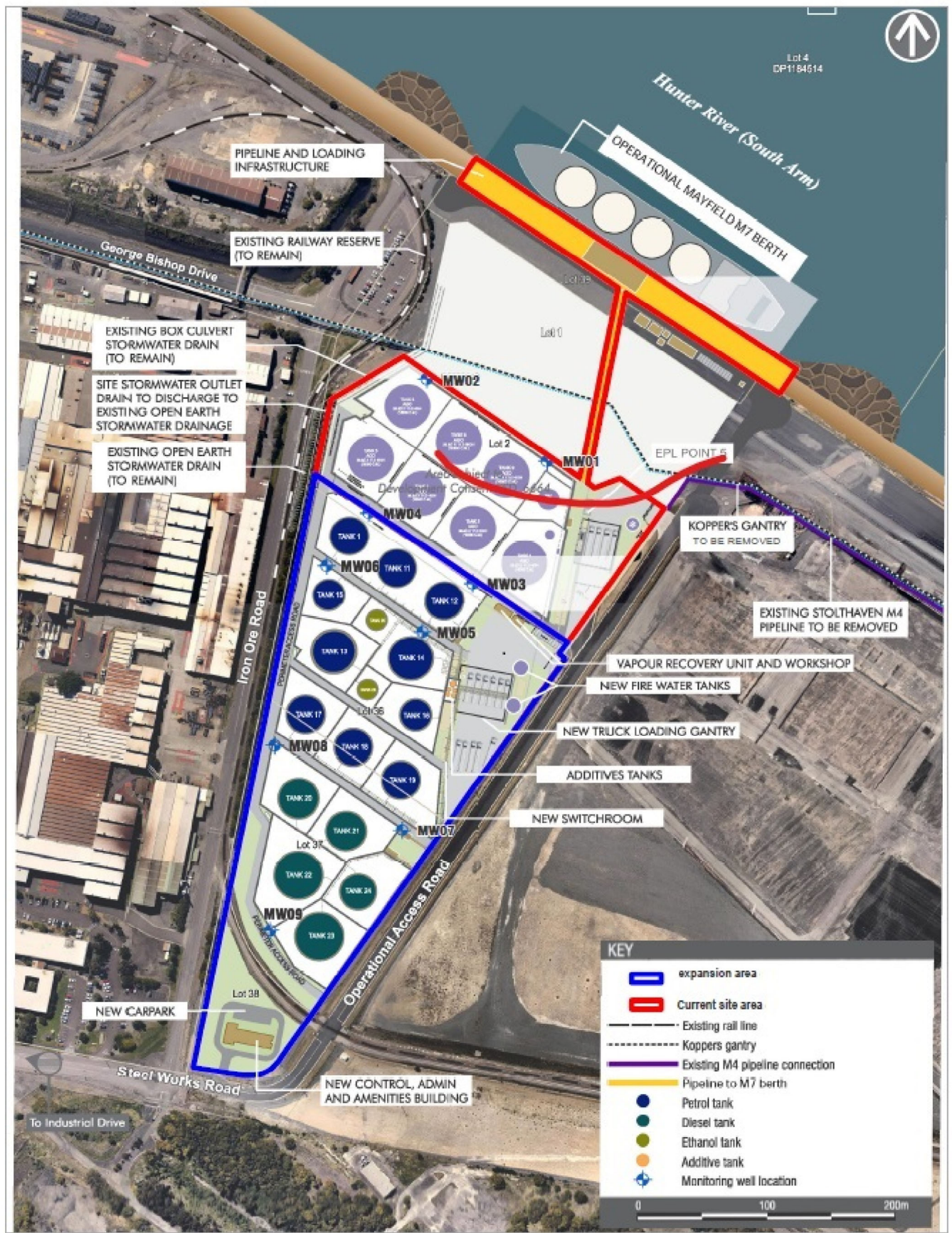
Stolhaven Australia Pty Ltd  
Stolhaven Bulk Fuel Storage Facility  
Annual Report 2022

Project No. 12545253  
Revision No. 0  
Date 02/02/2023

Site location

FIGURE 1





Paper Size ISO A4  
 0 0.025 0.05 0.075 0.1 0.125  
 Kilometers



Stolthaven Australia Pty Ltd  
 Stolthaven Bulk Fuel Storage Facility  
 Annual Report 2022

Project No. 12545253  
 Revision No. 0  
 Date 02/02/2023

Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 58

**FIGURE 2**

# **Appendix B**

**DPE Correspondence Letters**



Mr Gaetan Amodeo  
Compliance & Risk Manager  
Stolthaven Australia Pty Ltd  
Level 6, 60 Albert Road  
South Melbourne, Victoria 3205

Dear Mr Amodeo

**Stolthaven Fuel Terminal – Stage 3 (SSD 7065)  
Surrender of Development Consent**

I refer to your letter dated 23 April 2020 providing formal notice of Stolthaven Australia Pty Ltd's surrender of State significant development (SSD) consent 6664 (as modified), as required by Condition B11 of Schedule B of SSD 7065.

The Department has reviewed the notice of surrender of development consent and is satisfied the information provided addresses the relevant requirements pursuant to clause 97(1) of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).

Pursuant to clause 97(2) of the EP&A Regulation, the notice of surrender of development consent takes effect on the date it is received by the consent authority, as such, development consent SSD 6664 is surrendered effective 23 April 2020.

The requirement of Condition B11 of Schedule B of SSD 7065 has now been satisfied.

Should you have any queries, please do not hesitate to contact Olivia Hirst, Environmental Assessment Officer, on (02) 9274 6583 or via [Olivia.hirst@planning.nsw.gov.au](mailto:Olivia.hirst@planning.nsw.gov.au).

Yours sincerely

A handwritten signature in black ink that reads 'C. Ritchie'.

8 May 2020

Chris Ritchie  
Director  
Industry Assessments  
*as delegate of the Planning Secretary*



# **Appendix C**

## **Stormwater Monitoring**



**First Flush Results (Max Capacity 38,500 Litres) 2022**

	Samples Collected:	Samples Tested:	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS)	Volume (L)	Comments
2022 191	6/01/2022	7/01/2022	7.10	< 2	7.43	8	20,000	Release 10 Jan
192	17/01/2022	18/01/2022	7.38	< 2	7.17	6	25,000	Release 19 Jan, results rec'd late PM 18 Jan
193	14/02/2022	15/02/2022	7.00	< 2	7.02	5	35,000	Release 16 Feb
194	1/03/2022	2/03/2022	8.20	< 2	7.57	26	35,000	Release 02 Mar - TSS limit 30
195	3/07/2022	3/08/2022	6.80	< 2	7.44	9	35,000	Release 09 Mar
196	22.03.2022	23.03.2022	8.40	< 2	7.73	5	5,000	Released 23 Mar PM
197	28.03.2022	29.03.2022	8.00	< 2	7.24	5	35,000	Release started 29 Mar PM
198	4/08/2022	4/11/2022	8.20	< 2	7.30	5	30,000	Release started 11 Apr PM
199	26.04.2022	27.04.2022	8.20	< 2	7.37	5	30,000	Release started 27 Apr PM
200	4/10/2022	4/11/2022	7.20	< 2	7.85	11	25,000	Release started 12 May PM
201	26.04.2022	27.04.2022	8.20	< 2	7.37	5	30,000	Release started 27 Apr PM
202	5/10/2022	5/11/2022	7.20	< 2	7.85	11	30,000	Release started 11 May
203	24.05.2022	25.05.2022	8.80	< 2	7.56	9	30,000	Release started 25 may
204	6/06/2022	6/06/2022	8.30	< 2	7.54	5	30,000	Release started 08 jun AM
205	20/06/2022	20/06/2022	7.80	< 2	7.45	17	30,000	Release started 13:30 21/06/22
206	28.06.2022	28.06.2022	7.20	< 2	6.85	5	30,000	Release started 29 Jun AM
207	7/04/2022	7/05/2022	9.50	< 2	7.32	10	30,000	Release started 5 Jul PM
208	7/11/2022	7/12/2022	10.90	< 2	7.42	20	30,000	Release delayed due shipping, anticipate release 14/07 AM
209	20.07.2022	21.07.2022	9.00	< 2	7.52	31	0	NO RELEASE - hold and recirculate
210	25.07.2022	26.07.2022	7.40	< 2	7.65	13	25,000	Resteted & Release started 27 Jul AM
211	8/08/2022	8/09/2022	7.00	4	7.66	9	25,000	Release delayed due shipping, release 11/08 AM
212	25.08.2022	26.08.2022	7.00	< 2	7.17	21	25,000	Release delayed due shipping, release 29/08 AM
213	9/01/2022	9/02/2022	8.00	< 2	7.61	16	20,000	Release started 11:30hrs 02 Sept.
214	9/05/2022	9/06/2022	8.60	< 2	7.50	6	20,000	Release started 10:30hrs 06 Sept.
215	16.09.2022	16.09.2022	6.80	< 2	7.38	22	20,000	Results received 19/09 - release started 10:30hrs 19th Sept
216	26.09.2022	27.09.2022	8.60	< 2	8.03	17	20,000	Results received 27/09 - release 28/09
217	10/06/2022	10/07/2022	7.60	< 2	7.28	27	35,000	Results received 07/10 late PM - release started 08:00hrs 10th Oct
218	21.10.2022	24.10.2022	7.90	< 2	7.46	8	35,000	Results received 25/10 late PM - release being delayed until post shipping event 26/10
219	11/08/2022	11/09/2022	8.50	< 2	7.17	5	15,000	Results received 09/11 late PM - release started 08:30hrs 10/11
220	14.11.2022	15.11.2022	6.80	< 2	7.58	9	15,000	Results received 14/11 late PM - release started 06:30hrs 15/11
221	28.11.2022	28.11.2022	4.70	< 2	7.82	10	15,000	Results received 29/11 AM - release started 12:30hrs 29/11
222	19.12.2022	20.12.2022	7.00	< 2	7.84	5	15,000	Results received 22/12 PM - release started 07:30hrs 21/12
2023 223								
224								
225								
226								
227								
228								
229								
230								



# **Appendix D**

## **Hourly Truck Movements**



# REPORTING PERIOD: January

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	10	9	17	11	7	15	13	10	14	12	9	8
Bay 2	8	7	20	13	20	14	15	11	11	14	10	10
Bay 3	13	19	22	18	24	21	15	18	31	22	14	26
Bay 4	10	10	20	6	21	15	7	12	15	12	9	15
<b>Total</b>	<b>41</b>	<b>45</b>	<b>79</b>	<b>48</b>	<b>72</b>	<b>65</b>	<b>50</b>	<b>51</b>	<b>71</b>	<b>60</b>	<b>42</b>	<b>59</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	10	17	15	14	15	7	6	14	8	7	10	1
Bay 2	12	10	15	12	11	9	4	4	5	2	0	1
Bay 3	19	26	29	20	14	14	12	15	11	14	13	4
Bay 4	15	22	19	12	11	8	8	5	7	4	8	2
<b>Total</b>	<b>56</b>	<b>75</b>	<b>78</b>	<b>58</b>	<b>51</b>	<b>38</b>	<b>30</b>	<b>38</b>	<b>31</b>	<b>27</b>	<b>31</b>	<b>8</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/01/2022	0	0	1	0	1	1	1	1	0	1	1	1
2/01/2022	1	1	1	1	0	2	1	0	1	0	1	2
3/01/2022	4	2	3	2	3	2	3	2	3	2	0	2
4/01/2022	1	1	6	2	6	2	0	3	3	1	1	2
5/01/2022	3	3	2	2	2	1	5	1	4	2	0	3
6/01/2022	0	4	4	1	0	2	6	2	1	3	2	1
7/01/2022	3	2	0	2	3	1	0	2	4	3	0	1
8/01/2022	0	1	1	1	0	2	1	0	2	0	0	1
9/01/2022	0	0	0	1	1	3	0	0	1	0	1	2
10/01/2022	2	2	2	0	3	3	1	0	4	3	1	2
11/01/2022	0	1	3	2	4	1	0	2	7	4	1	1
12/01/2022	0	1	3	2	3	1	0	3	1	2	1	2
13/01/2022	0	0	4	2	3	3	1	1	3	7	1	1
14/01/2022	0	1	3	2	4	2	0	2	1	1	1	2
15/01/2022	0	1	3	1	1	1	1	2	3	0	2	4
16/01/2022	5	0	1	2	1	0	3	5	2	0	1	5
17/01/2022	4	2	2	3	1	4	5	1	5	1	0	6
18/01/2022	2	1	3	1	6	3	4	2	0	4	4	3
19/01/2022	1	3	2	1	3	5	3	2	3	3	1	2
20/01/2022	0	1	5	4	5	1	2	2	5	4	6	3
21/01/2022	1	1	3	3	2	6	1	1	3	4	1	1
22/01/2022	1	1	4	1	1	0	0	1	2	1	2	0
23/01/2022	0	2	2	0	2	2	2	1	0	2	1	1
24/01/2022	3	4	2	2	5	2	1	1	1	3	1	1
25/01/2022	2	3	3	0	2	1	2	2	1	1	3	3
26/01/2022	1	0	3	1	2	2	0	1	0	0	2	1
27/01/2022	1	2	5	2	3	4	1	3	2	2	3	0
28/01/2022	1	2	3	2	1	3	3	2	2	1	1	3
29/01/2022	2	1	3	1	2	1	0	3	1	1	3	0
30/01/2022	2	2	0	1	0	1	1	1	0	1	0	1
31/01/2022	1	0	2	3	2	3	2	2	6	3	0	2
<b>Total</b>	<b>41</b>	<b>45</b>	<b>79</b>	<b>48</b>	<b>72</b>	<b>65</b>	<b>50</b>	<b>51</b>	<b>71</b>	<b>60</b>	<b>42</b>	<b>59</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/01/2022	1	1	2	1	0	1	1	1	0	0	0	0
2/01/2022	0	0	0	0	0	1	0	0	0	0	0	1
3/01/2022	3	4	3	4	1	2	1	3	1	3	3	1
4/01/2022	1	7	6	3	3	1	1	2	3	1	0	1
5/01/2022	3	3	5	1	2	3	1	3	2	1	1	0
6/01/2022	2	3	3	3	2	1	3	0	1	3	1	0
7/01/2022	2	0	4	2	1	2	0	0	2	1	0	0
8/01/2022	2	0	1	0	1	0	0	1	1	1	0	0
9/01/2022	0	1	1	2	1	1	2	0	1	1	1	1
10/01/2022	1	3	3	3	1	1	0	3	1	2	0	0
11/01/2022	1	4	2	4	1	1	1	1	0	1	2	0
12/01/2022	4	3	1	1	1	0	0	0	2	2	1	0
13/01/2022	3	2	2	2	0	4	0	1	0	1	2	0
14/01/2022	1	3	2	1	3	1	0	2	0	1	1	0
15/01/2022	3	2	0	3	2	3	3	0	1	1	1	1
16/01/2022	3	2	2	1	1	1	2	0	2	1	1	0
17/01/2022	5	4	3	0	3	3	1	2	1	1	2	3
18/01/2022	2	3	2	2	2	3	2	1	2	1	3	0
19/01/2022	3	4	7	1	3	2	2	4	1	2	2	0
20/01/2022	4	2	6	4	4	2	0	2	2	0	2	0
21/01/2022	4	3	5	3	4	1	3	2	2	1	2	0
22/01/2022	1	1	0	0	1	0	0	1	1	0	1	0
23/01/2022	2	2	0	0	0	1	1	1	1	2	2	0
24/01/2022	0	2	1	3	3	0	0	1	0	0	0	0
25/01/2022	0	2	3	1	2	0	0	2	0	0	1	0
26/01/2022	1	2	3	1	0	0	2	0	2	0	0	0
27/01/2022	0	2	2	6	3	0	2	0	0	0	1	0
28/01/2022	1	2	0	2	3	0	0	1	1	0	0	0
29/01/2022	0	1	3	0	0	0	0	1	0	0	0	0
30/01/2022	1	1	3	0	0	2	0	1	0	0	0	0
31/01/2022	2	6	3	4	3	1	2	2	1	0	1	0
<b>Total</b>	<b>56</b>	<b>75</b>	<b>78</b>	<b>58</b>	<b>51</b>	<b>38</b>	<b>30</b>	<b>38</b>	<b>31</b>	<b>27</b>	<b>31</b>	<b>8</b>



## REPORTING PERIOD: February

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	14	12	15	12	12	12	8	10	11	8	10	10
Bay 2	15	14	12	20	15	11	9	17	13	13	14	16
Bay 3	22	18	19	22	25	22	19	24	23	14	15	25
Bay 4	18	15	15	12	15	18	7	12	16	10	14	15
<b>Total</b>	<b>69</b>	<b>59</b>	<b>61</b>	<b>66</b>	<b>67</b>	<b>63</b>	<b>43</b>	<b>63</b>	<b>63</b>	<b>45</b>	<b>53</b>	<b>66</b>
Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	17	20	12	12	14	13	8	7	15	4	6	3
Bay 2	19	28	16	12	14	7	8	11	3	6	7	2
Bay 3	27	29	23	26	18	18	17	19	12	8	15	6
Bay 4	24	28	23	21	15	8	10	17	12	11	11	2
<b>Total</b>	<b>87</b>	<b>105</b>	<b>74</b>	<b>71</b>	<b>61</b>	<b>46</b>	<b>43</b>	<b>54</b>	<b>42</b>	<b>29</b>	<b>39</b>	<b>13</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/02/2022	0	2	1	3	2	2	0	2	5	0	1	2
2/02/2022	0	2	1	3	1	4	1	2	0	3	2	0
3/02/2022	1	3	3	1	3	4	1	1	3	0	2	3
4/02/2022	1	2	0	2	1	1	1	1	1	1	1	3
5/02/2022	2	2	0	2	0	1	1	1	0	1	1	0
6/02/2022	1	1	1	0	1	0	0	1	1	0	1	2
7/02/2022	2	2	2	1	1	1	2	2	0	1	0	2
8/02/2022	2	2	2	3	3	1	0	1	5	1	1	1
9/02/2022	4	1	4	2	1	4	0	1	2	4	3	1
10/02/2022	4	2	4	5	1	2	3	4	4	3	1	2
11/02/2022	1	1	4	2	5	1	1	5	3	1	2	2
12/02/2022	5	3	1	1	2	2	3	0	1	0	2	2
13/02/2022	4	0	1	2	0	1	6	1	3	2	3	1
14/02/2022	5	3	3	1	4	2	2	5	6	3	3	1
15/02/2022	1	2	3	2	4	4	2	4	3	2	2	3
16/02/2022	2	1	3	4	4	2	1	5	4	2	4	1
17/02/2022	5	3	2	1	8	4	2	1	4	3	1	7
18/02/2022	2	3	3	4	4	1	2	0	2	3	3	4
19/02/2022	5	2	1	2	0	2	0	3	2	1	2	1
20/02/2022	2	3	1	2	0	2	2	2	1	1	4	4
21/02/2022	6	4	3	3	2	2	2	4	0	2	1	4
22/02/2022	1	2	2	4	4	2	0	3	3	4	1	3
23/02/2022	2	2	3	2	3	2	2	2	1	0	4	3
24/02/2022	3	3	4	4	4	4	1	2	2	1	5	4
25/02/2022	0	1	4	2	4	2	2	2	2	0	1	1
26/02/2022	1	1	3	1	3	3	2	3	2	3	0	2
27/02/2022	3	3	2	2	0	3	2	3	1	0	2	2
28/02/2022	4	3	0	5	2	4	2	2	2	3	0	5
1/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
2/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
3/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>69</b>	<b>59</b>	<b>61</b>	<b>66</b>	<b>67</b>	<b>63</b>	<b>43</b>	<b>63</b>	<b>63</b>	<b>45</b>	<b>53</b>	<b>66</b>
Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/02/2022	0	2	1	2	5	1	3	1	2	0	4	0
2/02/2022	6	5	0	3	2	0	3	1	0	0	1	0
3/02/2022	0	3	4	1	3	1	1	0	1	2	3	0
4/02/2022	2	0	2	2	2	1	0	0	0	0	0	0
5/02/2022	1	1	3	2	0	0	0	0	1	0	0	0
6/02/2022	3	3	0	1	0	0	0	1	0	1	1	0
7/02/2022	3	6	1	3	4	0	1	2	1	1	1	1
8/02/2022	4	4	6	5	0	2	2	1	3	1	0	1
9/02/2022	3	2	4	2	1	4	5	1	2	1	2	0
10/02/2022	1	6	7	4	1	3	2	6	2	1	2	1
11/02/2022	5	5	4	2	2	3	2	3	3	0	0	0
12/02/2022	4	3	1	1	2	1	1	2	1	1	3	0
13/02/2022	4	7	1	0	1	1	3	0	1	1	2	2
14/02/2022	4	5	7	3	2	2	4	2	3	1	2	1
15/02/2022	2	4	4	3	3	1	1	4	3	2	1	0
16/02/2022	2	5	4	2	1	2	0	2	2	2	0	0
17/02/2022	4	3	3	4	6	0	1	1	2	2	3	0
18/02/2022	1	5	3	3	3	2	2	4	0	1	1	0
19/02/2022	4	3	3	3	2	3	2	3	2	3	0	0
20/02/2022	3	5	0	1	1	2	1	3	0	1	2	0
21/02/2022	4	6	2	4	2	4	0	1	5	1	3	0
22/02/2022	3	2	3	5	3	1	1	4	1	2	2	2
23/02/2022	3	3	2	3	3	2	2	2	1	1	1	1
24/02/2022	6	2	0	4	2	2	2	1	1	0	1	1
25/02/2022	1	6	3	1	3	2	3	3	0	1	2	0
26/02/2022	4	3	2	3	2	0	0	2	2	0	0	1
27/02/2022	4	1	2	1	1	4	0	2	1	0	1	1
28/02/2022	6	5	2	3	4	2	1	2	2	3	1	1
1/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
2/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
3/03/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>87</b>	<b>105</b>	<b>74</b>	<b>71</b>	<b>61</b>	<b>46</b>	<b>43</b>	<b>54</b>	<b>42</b>	<b>29</b>	<b>39</b>	<b>13</b>



# REPORTING PERIOD: March

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	11	7	18	16	16	16	8	11	10	7	13	8
Bay 2	14	10	15	19	22	14	15	10	13	15	16	10
Bay 3	26	15	26	23	32	31	17	17	25	26	21	25
Bay 4	16	12	24	15	24	19	8	11	15	16	16	17
<b>Total</b>	<b>67</b>	<b>44</b>	<b>83</b>	<b>73</b>	<b>94</b>	<b>80</b>	<b>48</b>	<b>49</b>	<b>63</b>	<b>64</b>	<b>66</b>	<b>60</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	9	13	18	13	9	5	4	6	9	6	7	0
Bay 2	15	18	15	17	9	3	9	7	8	4	7	2
Bay 3	25	26	29	24	16	18	20	15	14	12	12	5
Bay 4	24	21	27	18	11	12	7	7	9	12	6	2
<b>Total</b>	<b>73</b>	<b>78</b>	<b>89</b>	<b>72</b>	<b>45</b>	<b>38</b>	<b>40</b>	<b>35</b>	<b>40</b>	<b>34</b>	<b>32</b>	<b>9</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/03/2022	1	2	4	7	3	6	2	0	4	3	4	4
2/03/2022	5	5	4	4	2	5	7	1	4	4	2	2
3/03/2022	2	4	5	7	3	2	3	3	1	4	3	2
4/03/2022	3	1	5	2	4	1	2	1	1	3	2	5
5/03/2022	3	3	2	2	1	5	3	1	1	1	1	3
6/03/2022	2	1	4	2	1	1	0	3	3	0	2	3
7/03/2022	3	1	3	3	4	2	0	1	3	3	3	1
8/03/2022	1	1	1	2	4	4	1	0	0	6	3	1
9/03/2022	2	1	0	3	1	4	2	0	0	2	1	0
10/03/2022	0	0	4	3	2	1	1	3	3	3	3	2
11/03/2022	3	1	4	3	5	3	2	3	4	1	2	1
12/03/2022	0	0	4	0	4	1	1	3	2	2	1	1
13/03/2022	5	0	1	3	5	0	1	1	1	1	6	1
14/03/2022	3	2	1	1	6	4	0	2	3	3	1	5
15/03/2022	3	2	4	1	4	4	1	1	2	2	0	2
16/03/2022	2	1	3	3	3	3	2	1	4	4	1	3
17/03/2022	3	3	2	2	3	2	4	4	2	1	4	5
18/03/2022	1	2	4	3	2	4	0	4	2	2	2	0
19/03/2022	2	2	2	2	4	5	0	1	3	3	3	1
20/03/2022	2	1	2	1	0	1	1	1	2	1	3	2
21/03/2022	5	3	3	3	5	1	2	3	2	0	2	1
22/03/2022	5	1	4	2	7	1	2	2	4	3	1	3
23/03/2022	1	1	2	4	1	4	1	1	2	1	1	4
24/03/2022	2	1	2	3	4	3	2	1	2	2	2	2
25/03/2022	2	0	4	1	5	5	0	1	1	2	1	1
26/03/2022	1	1	1	2	0	1	1	1	1	0	1	0
27/03/2022	1	1	1	1	0	2	2	0	0	1	2	1
28/03/2022	2	0	0	1	4	2	1	1	1	1	3	3
29/03/2022	1	1	3	0	2	0	2	1	1	2	2	0
30/03/2022	1	2	1	1	2	1	2	1	1	2	1	1
31/03/2022	0	0	3	1	3	2	0	3	3	1	3	0
<b>Total</b>	<b>67</b>	<b>44</b>	<b>83</b>	<b>73</b>	<b>94</b>	<b>80</b>	<b>48</b>	<b>49</b>	<b>63</b>	<b>64</b>	<b>66</b>	<b>60</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/03/2022	4	3	5	6	6	1	1	3	1	3	5	1
2/03/2022	7	7	6	4	0	1	4	1	4	2	3	1
3/03/2022	8	3	4	1	2	2	2	0	2	3	3	1
4/03/2022	3	5	6	3	1	2	2	3	3	0	1	1
5/03/2022	5	5	1	1	0	1	2	1	1	1	2	0
6/03/2022	2	1	1	0	0	1	1	1	0	1	1	0
7/03/2022	2	1	3	1	1	0	0	2	0	0	0	0
8/03/2022	3	1	2	4	2	0	1	1	0	1	1	0
9/03/2022	0	1	1	0	1	0	1	0	0	0	0	0
10/03/2022	0	2	3	3	2	3	0	0	1	0	0	0
11/03/2022	0	2	2	3	1	2	1	2	2	2	0	0
12/03/2022	2	2	4	1	1	0	3	0	1	0	1	0
13/03/2022	3	1	3	0	3	1	1	2	2	0	2	0
14/03/2022	6	0	3	3	3	3	4	2	3	1	2	0
15/03/2022	3	3	3	4	1	2	2	1	3	1	2	0
16/03/2022	3	3	4	2	1	4	2	1	3	0	1	1
17/03/2022	1	2	2	3	1	5	2	2	3	1	4	0
18/03/2022	3	1	3	4	2	1	1	1	2	1	1	0
19/03/2022	2	4	4	1	0	0	2	1	1	3	0	0
20/03/2022	4	4	2	0	2	0	3	2	0	2	0	0
21/03/2022	2	3	1	2	2	1	0	3	1	2	0	0
22/03/2022	0	2	5	8	2	1	1	1	2	1	1	0
23/03/2022	2	4	3	5	2	2	1	3	0	1	1	0
24/03/2022	1	3	5	1	3	1	0	2	0	3	0	2
25/03/2022	2	4	2	2	1	0	0	0	2	1	0	0
26/03/2022	0	2	1	0	0	0	0	0	0	0	0	0
27/03/2022	1	2	1	1	1	0	1	0	0	1	0	1
28/03/2022	1	4	2	2	1	1	1	0	2	0	0	0
29/03/2022	2	2	2	1	2	1	0	0	1	2	0	0
30/03/2022	1	1	1	4	1	1	0	0	0	0	1	0
31/03/2022	0	0	4	2	0	1	1	0	0	1	0	1
<b>Total</b>	<b>73</b>	<b>78</b>	<b>89</b>	<b>72</b>	<b>45</b>	<b>38</b>	<b>40</b>	<b>35</b>	<b>40</b>	<b>34</b>	<b>32</b>	<b>9</b>



# REPORTING PERIOD: April

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	10	11	19	13	13	10	7	10	11	11	9	9
Bay 2	9	7	12	12	20	8	6	13	12	7	10	9
Bay 3	14	8	10	13	16	12	9	11	9	10	11	11
Bay 4	10	8	11	5	13	6	3	8	6	6	7	4
<b>Total</b>	<b>43</b>	<b>34</b>	<b>52</b>	<b>43</b>	<b>62</b>	<b>36</b>	<b>25</b>	<b>42</b>	<b>38</b>	<b>34</b>	<b>37</b>	<b>33</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	10	16	18	13	15	8	9	6	8	8	7	0
Bay 2	11	15	17	14	7	9	6	4	4	6	5	0
Bay 3	11	17	10	6	9	10	7	9	5	7	4	2
Bay 4	14	15	15	10	9	9	5	8	2	6	5	3
<b>Total</b>	<b>46</b>	<b>63</b>	<b>60</b>	<b>43</b>	<b>40</b>	<b>36</b>	<b>27</b>	<b>27</b>	<b>19</b>	<b>27</b>	<b>21</b>	<b>5</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/04/2022	1	0	1	1	2	1	0	2	3	0	4	0
2/04/2022	0	4	0	1	0	0	2	0	1	0	1	0
3/04/2022	1	1	1	0	0	2	0	1	1	1	1	3
4/04/2022	1	1	2	2	3	1	1	1	2	1	0	1
5/04/2022	1	1	5	1	3	1	0	1	0	3	0	1
6/04/2022	0	1	1	0	3	2	0	0	1	0	0	1
7/04/2022	2	1	2	2	0	0	0	2	0	2	1	0
8/04/2022	1	2	1	4	5	0	0	0	1	2	0	1
9/04/2022	1	1	0	2	0	0	1	0	2	0	2	2
10/04/2022	2	1	0	1	3	0	0	1	0	1	1	1
11/04/2022	1	2	3	3	3	1	1	1	2	0	1	0
12/04/2022	1	0	2	0	1	2	1	2	2	1	1	0
13/04/2022	0	0	1	0	1	0	1	0	0	0	0	0
14/04/2022	0	0	1	0	0	0	0	0	0	0	0	0
15/04/2022	0	0	0	0	0	0	0	0	0	0	0	0
16/04/2022	1	3	0	0	1	1	0	2	2	1	1	2
17/04/2022	2	1	2	1	2	0	2	1	1	2	3	4
18/04/2022	5	3	1	2	3	0	2	4	1	0	3	0
19/04/2022	2	2	1	1	3	1	2	3	1	2	2	1
20/04/2022	1	0	4	2	1	3	1	1	3	1	4	1
21/04/2022	1	1	2	3	2	3	0	3	3	4	0	1
22/04/2022	1	1	3	2	3	1	2	1	1	1	0	1
23/04/2022	3	0	0	2	3	1	1	1	0	3	1	1
24/04/2022	0	0	0	3	1	1	0	0	0	1	2	2
25/04/2022	4	0	4	2	3	2	0	2	2	0	1	0
26/04/2022	1	2	2	1	5	4	0	1	0	1	3	2
27/04/2022	3	2	4	3	1	4	2	2	2	2	3	1
28/04/2022	1	1	4	2	4	1	1	2	2	0	1	0
29/04/2022	1	2	3	1	3	3	3	6	3	2	1	5
30/04/2022	5	1	2	1	3	1	2	2	2	3	0	2
1/05/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>43</b>	<b>34</b>	<b>52</b>	<b>43</b>	<b>62</b>	<b>36</b>	<b>25</b>	<b>42</b>	<b>38</b>	<b>34</b>	<b>37</b>	<b>33</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/04/2022	0	4	0	1	3	0	1	0	0	2	0	0
2/04/2022	1	2	3	0	1	1	1	1	0	0	0	0
3/04/2022	2	2	0	1	0	2	0	1	1	0	0	0
4/04/2022	0	3	3	5	0	0	0	2	0	0	0	0
5/04/2022	0	3	0	6	3	1	0	1	0	2	3	1
6/04/2022	2	1	3	5	2	1	3	0	1	0	0	0
7/04/2022	1	4	3	0	0	2	0	1	0	1	0	0
8/04/2022	0	1	3	1	1	0	0	0	0	2	1	0
9/04/2022	1	2	1	0	0	2	1	0	0	0	1	0
10/04/2022	1	1	0	1	0	1	1	0	0	0	1	0
11/04/2022	3	3	3	2	1	1	0	2	1	0	0	0
12/04/2022	1	2	0	2	4	1	0	1	1	1	0	0
13/04/2022	0	0	0	0	0	0	0	0	0	0	1	0
14/04/2022	0	0	0	0	0	0	0	0	0	0	0	0
15/04/2022	0	0	0	0	0	0	0	0	1	0	0	0
16/04/2022	2	3	1	2	3	2	2	0	1	3	0	1
17/04/2022	5	3	2	0	3	1	3	4	1	0	0	0
18/04/2022	3	2	2	1	1	3	0	1	2	4	2	0
19/04/2022	2	6	3	0	2	2	1	1	2	1	4	0
20/04/2022	0	2	2	0	2	2	1	2	0	3	0	0
21/04/2022	2	3	4	4	1	2	1	0	0	1	1	0
22/04/2022	1	2	1	2	3	0	1	1	0	0	1	0
23/04/2022	3	3	1	0	0	2	1	0	2	1	0	0
24/04/2022	2	1	1	0	0	1	1	0	0	0	0	0
25/04/2022	3	1	3	1	2	1	0	1	1	2	1	0
26/04/2022	1	2	2	4	5	2	0	2	2	0	0	1
27/04/2022	1	2	4	1	1	1	1	0	1	0	1	0
28/04/2022	3	0	7	2	1	1	3	2	1	3	2	0
29/04/2022	3	4	6	2	0	2	3	2	1	1	1	0
30/04/2022	3	1	2	0	1	2	2	2	0	0	1	2
1/05/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>46</b>	<b>63</b>	<b>60</b>	<b>43</b>	<b>40</b>	<b>36</b>	<b>27</b>	<b>27</b>	<b>19</b>	<b>27</b>	<b>21</b>	<b>5</b>





# REPORTING PERIOD: May

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	14	6	23	14	18	13	12	11	14	10	16	14
Bay 2	7	3	17	17	15	11	12	21	11	9	10	14
Bay 3	17	13	21	24	23	24	18	18	19	19	25	21
Bay 4	15	8	18	17	20	15	11	10	12	12	11	24
<b>Total</b>	<b>53</b>	<b>30</b>	<b>79</b>	<b>72</b>	<b>76</b>	<b>63</b>	<b>53</b>	<b>60</b>	<b>56</b>	<b>50</b>	<b>62</b>	<b>73</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	10	16	20	15	13	15	13	9	8	9	9	2
Bay 2	16	15	24	10	12	5	8	4	5	3	7	2
Bay 3	26	20	31	22	18	16	17	16	10	7	21	1
Bay 4	14	24	31	18	16	12	10	10	7	8	9	5
<b>Total</b>	<b>66</b>	<b>75</b>	<b>106</b>	<b>65</b>	<b>59</b>	<b>48</b>	<b>48</b>	<b>39</b>	<b>30</b>	<b>27</b>	<b>46</b>	<b>10</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/05/2022	2	1	2	2	2	0	3	1	2	0	2	4
2/05/2022	1	2	5	3	5	2	8	2	4	4	4	3
3/05/2022	1	2	5	2	3	3	3	5	4	1	1	1
4/05/2022	1	2	4	3	3	2	4	1	3	3	2	0
5/05/2022	1	1	5	6	6	2	2	4	2	3	1	3
6/05/2022	3	0	4	2	0	3	2	3	2	2	1	1
7/05/2022	2	2	1	2	0	2	0	5	0	1	1	2
8/05/2022	1	0	2	4	1	3	1	0	2	2	3	4
9/05/2022	5	1	4	4	3	4	2	2	2	3	3	2
10/05/2022	2	0	2	1	2	3	0	3	2	2	3	0
11/05/2022	4	2	1	1	2	2	4	4	1	2	2	4
12/05/2022	4	1	4	1	3	3	6	2	1	2	6	2
13/05/2022	1	0	3	3	1	2	1	0	2	1	2	2
14/05/2022	1	0	3	1	1	0	1	1	0	0	0	0
15/05/2022	1	0	1	2	0	1	0	1	1	0	0	2
16/05/2022	1	2	1	3	4	0	1	1	2	0	2	1
17/05/2022	1	0	4	1	4	1	1	3	2	3	0	1
18/05/2022	0	0	3	0	3	3	1	1	3	1	3	1
19/05/2022	3	2	1	1	3	1	0	1	4	1	0	4
20/05/2022	0	1	2	2	2	4	0	0	1	2	0	1
21/05/2022	0	0	0	3	2	2	0	1	0	2	3	1
22/05/2022	1	1	0	0	2	1	0	0	0	2	2	3
23/05/2022	4	1	2	1	2	1	0	4	2	0	2	4
24/05/2022	2	0	2	2	1	2	1	0	1	2	1	2
25/05/2022	1	2	2	1	2	1	0	1	2	1	1	0
26/05/2022	3	2	2	2	5	2	2	2	1	4	1	4
27/05/2022	0	1	2	6	2	4	1	4	2	2	6	4
28/05/2022	1	0	3	3	1	1	1	2	0	1	2	5
29/05/2022	2	0	3	1	0	2	2	2	2	0	0	6
30/05/2022	3	2	3	6	6	3	5	3	4	3	3	5
31/05/2022	1	2	3	3	5	3	1	1	2	0	5	1
<b>Total</b>	<b>53</b>	<b>30</b>	<b>79</b>	<b>72</b>	<b>76</b>	<b>63</b>	<b>53</b>	<b>60</b>	<b>56</b>	<b>50</b>	<b>62</b>	<b>73</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/05/2022	2	4	3	1	1	1	1	3	1	1	2	1
2/05/2022	3	2	5	4	0	2	3	1	3	1	1	0
3/05/2022	2	4	6	3	3	2	1	2	2	2	2	0
4/05/2022	2	4	9	2	3	2	3	1	2	0	4	0
5/05/2022	2	4	4	2	4	2	2	0	3	2	1	1
6/05/2022	2	3	5	2	1	0	4	2	2	2	2	0
7/05/2022	5	3	1	0	2	2	1	2	1	2	2	0
8/05/2022	1	0	2	1	2	4	2	0	0	0	2	1
9/05/2022	3	3	4	3	4	3	2	3	3	1	3	1
10/05/2022	1	5	2	0	1	0	1	0	0	0	1	0
11/05/2022	1	2	2	5	5	0	2	1	0	4	0	0
12/05/2022	2	4	5	3	2	2	2	4	1	1	0	0
13/05/2022	1	0	3	0	1	1	0	0	1	0	0	0
14/05/2022	1	1	4	1	0	0	1	0	0	0	1	0
15/05/2022	1	0	1	3	0	0	0	0	0	1	0	1
16/05/2022	3	2	2	3	1	2	1	1	1	0	2	0
17/05/2022	2	2	3	4	0	2	2	1	1	2	1	0
18/05/2022	1	1	3	2	0	1	1	1	0	0	2	0
19/05/2022	2	1	3	2	3	1	2	1	1	1	0	0
20/05/2022	1	1	4	3	1	0	0	0	0	1	2	0
21/05/2022	2	3	1	0	0	0	1	0	1	0	1	0
22/05/2022	0	2	0	0	1	0	1	0	0	0	1	0
23/05/2022	1	1	5	2	2	1	0	0	0	1	2	0
24/05/2022	1	1	2	1	3	1	0	3	0	1	1	0
25/05/2022	6	4	4	2	3	2	2	1	2	0	3	0
26/05/2022	4	3	5	1	5	4	1	2	3	0	2	2
27/05/2022	3	4	5	2	5	7	2	1	0	0	5	1
28/05/2022	3	3	2	3	2	3	4	2	2	1	2	2
29/05/2022	4	3	3	1	1	2	4	4	0	1	1	0
30/05/2022	2	3	5	5	1	0	1	1	0	1	0	0
31/05/2022	2	2	3	4	2	1	1	2	0	1	0	0
<b>Total</b>	<b>66</b>	<b>75</b>	<b>106</b>	<b>65</b>	<b>59</b>	<b>48</b>	<b>48</b>	<b>39</b>	<b>30</b>	<b>27</b>	<b>46</b>	<b>10</b>





## REPORTING PERIOD: June

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	16	6	20	21	17	19	15	5	18	15	21	15
Bay 2	15	4	13	13	25	13	21	18	19	9	13	14
Bay 3	23	14	21	32	31	25	23	28	27	19	26	30
Bay 4	20	10	17	23	29	16	20	17	15	17	14	22
<b>Total</b>	<b>74</b>	<b>34</b>	<b>71</b>	<b>89</b>	<b>102</b>	<b>73</b>	<b>79</b>	<b>68</b>	<b>79</b>	<b>60</b>	<b>74</b>	<b>81</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	12	19	13	23	19	12	4	11	6	15	9	6
Bay 2	18	12	12	13	16	10	6	9	4	11	8	1
Bay 3	24	28	27	31	24	13	18	12	16	11	14	2
Bay 4	23	20	20	22	15	12	15	14	12	13	9	1
<b>Total</b>	<b>77</b>	<b>79</b>	<b>72</b>	<b>89</b>	<b>74</b>	<b>47</b>	<b>43</b>	<b>46</b>	<b>38</b>	<b>50</b>	<b>40</b>	<b>10</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/06/2022	1	1	4	4	2	2	5	3	1	3	4	1
2/06/2022	5	3	0	5	7	1	5	3	2	3	0	6
3/06/2022	4	1	3	6	6	4	3	2	4	2	4	4
4/06/2022	5	0	2	3	0	2	5	2	2	0	3	4
5/06/2022	2	1	1	5	1	4	3	2	2	3	4	3
6/06/2022	5	2	4	3	6	4	7	1	7	0	4	5
7/06/2022	4	1	6	1	5	3	5	4	3	2	5	3
8/06/2022	3	3	2	3	2	5	3	4	2	4	3	2
9/06/2022	2	0	3	2	2	1	1	5	2	1	1	3
10/06/2022	1	2	1	4	2	3	2	3	1	1	1	2
11/06/2022	3	1	0	1	1	2	1	2	0	1	3	3
12/06/2022	2	0	0	2	1	0	0	0	0	1	1	0
13/06/2022	1	1	4	1	3	1	2	2	1	2	2	2
14/06/2022	0	1	1	2	3	0	3	0	9	3	2	3
15/06/2022	0	0	4	0	2	2	0	2	1	2	2	3
16/06/2022	1	1	4	5	7	4	0	5	1	2	3	2
17/06/2022	3	2	1	2	6	4	3	3	3	1	4	3
18/06/2022	3	0	1	4	2	1	4	1	3	3	2	2
19/06/2022	2	0	0	4	2	0	2	1	2	0	4	1
20/06/2022	2	4	4	3	3	3	1	4	3	4	3	4
21/06/2022	3	0	2	1	5	6	4	2	5	4	2	5
22/06/2022	5	1	5	5	1	1	2	0	2	3	0	2
23/06/2022	5	0	2	2	4	6	6	3	2	1	3	4
24/06/2022	1	4	4	4	3	3	3	2	3	2	3	2
25/06/2022	4	0	1	3	4	1	2	1	3	2	2	2
26/06/2022	1	1	0	4	1	2	0	2	4	3	1	4
27/06/2022	3	2	3	3	7	3	2	4	2	3	2	3
28/06/2022	1	1	6	2	4	3	2	3	2	0	2	3
29/06/2022	2	0	1	3	5	2	2	0	5	1	1	0
30/06/2022	0	1	2	2	5	0	1	2	2	3	3	0
1/07/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>74</b>	<b>34</b>	<b>71</b>	<b>89</b>	<b>102</b>	<b>73</b>	<b>79</b>	<b>68</b>	<b>79</b>	<b>60</b>	<b>74</b>	<b>81</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/06/2022	1	7	3	4	2	1	3	3	3	2	3	0
2/06/2022	1	3	3	4	3	3	1	5	1	1	1	1
3/06/2022	1	1	4	1	2	3	2	1	0	0	1	0
4/06/2022	2	3	2	3	3	1	2	1	0	2	2	0
5/06/2022	2	1	0	3	2	1	1	1	0	3	2	0
6/06/2022	3	2	1	5	4	2	2	3	2	3	1	0
7/06/2022	1	7	2	3	6	1	5	3	1	5	1	0
8/06/2022	4	6	5	4	2	0	0	2	2	1	0	0
9/06/2022	3	1	3	4	1	1	1	0	1	2	0	1
10/06/2022	2	2	0	3	3	1	1	2	1	0	1	0
11/06/2022	1	0	2	2	1	1	0	0	0	1	2	0
12/06/2022	3	1	0	1	1	0	0	1	0	0	1	0
13/06/2022	2	1	2	3	0	3	0	0	1	2	0	1
14/06/2022	5	3	2	0	1	1	0	2	0	0	2	0
15/06/2022	3	1	2	3	1	2	1	0	1	1	1	1
16/06/2022	3	2	3	7	5	2	1	1	3	4	1	1
17/06/2022	4	2	2	5	3	4	0	5	1	3	0	0
18/06/2022	4	4	4	1	2	1	3	0	2	0	1	3
19/06/2022	1	4	0	2	4	0	2	0	2	3	4	0
20/06/2022	5	2	5	3	2	0	1	2	2	2	0	0
21/06/2022	2	2	2	3	6	1	1	1	2	1	2	0
22/06/2022	5	5	4	3	2	0	5	1	1	2	2	1
23/06/2022	5	1	2	2	4	4	2	2	4	2	3	0
24/06/2022	5	0	5	5	4	4	1	0	2	1	1	0
25/06/2022	2	2	4	5	0	2	1	1	3	0	0	0
26/06/2022	2	1	1	0	2	2	3	2	0	3	1	0
27/06/2022	2	6	3	1	0	2	2	2	1	2	1	0
28/06/2022	1	2	3	2	1	1	1	2	0	0	2	0
29/06/2022	1	2	2	3	3	1	0	1	0	1	1	1
30/06/2022	1	5	1	4	4	2	1	2	2	3	3	0
1/07/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>77</b>	<b>79</b>	<b>72</b>	<b>89</b>	<b>74</b>	<b>47</b>	<b>43</b>	<b>46</b>	<b>38</b>	<b>50</b>	<b>40</b>	<b>10</b>



# REPORTING PERIOD: July

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	9	11	21	27	21	17	18	17	13	14	16	18
Bay 2	13	7	15	28	24	17	23	26	18	21	13	24
Bay 3	18	17	19	33	21	25	29	22	33	25	28	21
Bay 4	22	21	25	29	20	23	15	23	29	20	22	22
<b>Total</b>	<b>62</b>	<b>56</b>	<b>80</b>	<b>117</b>	<b>86</b>	<b>82</b>	<b>85</b>	<b>88</b>	<b>93</b>	<b>80</b>	<b>79</b>	<b>85</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	20	13	17	16	16	10	8	9	14	12	13	2
Bay 2	24	21	20	24	16	13	10	15	18	8	10	4
Bay 3	28	23	29	23	25	22	18	20	20	21	24	4
Bay 4	29	21	28	25	23	15	16	19	16	14	16	5
<b>Total</b>	<b>101</b>	<b>78</b>	<b>94</b>	<b>88</b>	<b>80</b>	<b>60</b>	<b>52</b>	<b>63</b>	<b>68</b>	<b>55</b>	<b>63</b>	<b>15</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/07/2022	1	2	6	5	2	6	5	4	2	4	5	3
2/07/2022	2	2	1	1	0	6	3	2	2	3	1	3
3/07/2022	2	3	0	1	0	1	4	2	1	2	3	3
4/07/2022	2	3	1	6	2	1	6	2	2	5	3	5
5/07/2022	1	2	3	3	2	0	1	3	4	1	0	1
6/07/2022	0	1	2	3	1	1	3	1	1	3	3	1
7/07/2022	0	0	0	0	0	0	2	0	2	0	1	2
8/07/2022	1	5	4	3	2	0	1	1	4	2	0	2
9/07/2022	0	2	2	1	4	2	1	1	3	1	1	0
10/07/2022	2	1	2	5	2	1	1	1	1	3	1	3
11/07/2022	4	3	2	6	1	6	2	3	3	3	6	2
12/07/2022	4	3	3	4	3	1	3	4	3	5	2	3
13/07/2022	1	4	3	5	3	3	4	4	1	2	0	4
14/07/2022	4	1	5	4	4	6	4	2	4	2	0	6
15/07/2022	2	2	2	5	4	2	5	1	1	3	6	4
16/07/2022	1	1	3	3	1	1	4	3	3	1	0	1
17/07/2022	2	0	2	2	0	2	1	3	2	0	3	2
18/07/2022	2	3	3	2	8	3	3	6	2	2	2	6
19/07/2022	3	0	3	3	6	7	4	4	2	2	5	2
20/07/2022	4	2	2	7	3	3	3	2	5	6	4	2
21/07/2022	3	2	3	5	4	1	2	5	3	2	4	4
22/07/2022	3	2	1	4	4	4	3	6	6	4	4	4
23/07/2022	4	1	2	5	3	2	2	5	0	3	3	0
24/07/2022	1	1	1	3	3	2	5	1	2	2	2	4
25/07/2022	2	6	3	8	5	3	4	6	5	2	2	4
26/07/2022	0	0	5	4	8	2	0	2	2	6	3	2
27/07/2022	2	1	5	4	5	4	1	0	6	1	4	2
28/07/2022	5	1	3	6	1	1	3	2	5	3	5	1
29/07/2022	1	0	5	5	3	3	4	6	7	5	2	5
30/07/2022	3	1	1	2	1	6	0	3	3	1	2	2
31/07/2022	0	1	2	2	1	2	1	3	6	1	2	2
<b>Total</b>	<b>62</b>	<b>56</b>	<b>80</b>	<b>117</b>	<b>86</b>	<b>82</b>	<b>85</b>	<b>88</b>	<b>93</b>	<b>80</b>	<b>79</b>	<b>85</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/07/2022	2	3	3	3	4	2	2	4	3	3	0	1
2/07/2022	2	2	4	4	0	2	1	1	1	1	4	0
3/07/2022	1	2	1	1	0	2	2	1	2	5	2	0
4/07/2022	1	3	4	2	2	2	0	1	1	1	3	2
5/07/2022	2	3	4	1	2	4	0	1	1	0	1	0
6/07/2022	1	3	1	1	0	2	1	0	0	0	0	0
7/07/2022	1	0	2	1	1	0	1	0	0	1	1	0
8/07/2022	0	1	5	2	1	3	0	3	0	0	2	1
9/07/2022	0	1	3	1	1	3	0	3	2	0	2	0
10/07/2022	3	1	2	2	1	0	3	2	1	0	0	1
11/07/2022	2	2	3	3	2	2	1	1	3	2	1	0
12/07/2022	4	4	4	5	5	1	2	3	3	0	3	0
13/07/2022	2	3	4	3	2	1	2	2	5	1	2	0
14/07/2022	2	1	2	5	2	0	3	2	3	2	1	0
15/07/2022	4	0	2	1	4	2	1	1	0	2	3	1
16/07/2022	4	2	3	2	2	1	1	3	1	2	2	0
17/07/2022	3	1	0	3	3	1	2	1	2	2	1	1
18/07/2022	1	1	4	4	1	2	3	4	1	2	3	0
19/07/2022	7	1	3	4	3	3	4	5	4	2	1	3
20/07/2022	6	6	5	4	5	4	2	6	3	1	2	0
21/07/2022	6	4	4	3	5	3	1	1	3	2	2	0
22/07/2022	4	1	5	4	3	1	3	2	5	2	1	0
23/07/2022	4	5	2	4	2	7	1	1	2	4	2	1
24/07/2022	3	2	2	1	1	3	1	3	4	1	5	1
25/07/2022	4	3	5	2	3	1	0	1	4	5	3	0
26/07/2022	8	3	6	4	5	0	1	1	3	3	3	0
27/07/2022	3	7	2	3	5	1	4	3	3	4	1	0
28/07/2022	3	4	3	4	6	2	3	1	2	5	5	1
29/07/2022	7	3	3	6	5	4	2	2	3	1	2	1
30/07/2022	7	2	1	3	2	0	2	3	1	1	1	1
31/07/2022	4	4	2	2	2	1	3	1	2	0	4	0
<b>Total</b>	<b>101</b>	<b>78</b>	<b>94</b>	<b>88</b>	<b>80</b>	<b>60</b>	<b>52</b>	<b>63</b>	<b>68</b>	<b>55</b>	<b>63</b>	<b>15</b>



# REPORTING PERIOD: August

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	7	11	18	30	27	20	23	20	11	17	21	24
Bay 2	7	9	21	29	29	15	19	30	27	22	29	28
Bay 3	24	28	30	37	39	31	31	30	28	39	33	34
Bay 4	20	17	25	30	29	18	21	30	22	22	27	34
<b>Total</b>	<b>58</b>	<b>65</b>	<b>94</b>	<b>126</b>	<b>124</b>	<b>84</b>	<b>94</b>	<b>110</b>	<b>88</b>	<b>100</b>	<b>110</b>	<b>120</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	13	20	20	21	23	14	7	13	12	12	13	2
Bay 2	27	32	18	31	22	17	14	18	8	12	14	6
Bay 3	36	38	27	42	33	29	28	21	27	24	30	9
Bay 4	23	29	30	29	25	17	18	22	14	15	21	8
<b>Total</b>	<b>99</b>	<b>119</b>	<b>95</b>	<b>123</b>	<b>103</b>	<b>77</b>	<b>67</b>	<b>74</b>	<b>61</b>	<b>63</b>	<b>78</b>	<b>25</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/08/2022	6	3	4	4	5	2	1	8	3	5	3	4
2/08/2022	3	1	5	5	5	4	1	3	3	1	4	3
3/08/2022	2	1	4	6	4	6	2	2	5	5	1	2
4/08/2022	2	1	4	5	1	3	4	2	4	2	2	2
5/08/2022	2	3	3	6	2	3	0	8	1	2	1	2
6/08/2022	1	3	1	4	5	2	3	4	1	3	2	3
7/08/2022	2	1	1	2	2	2	3	3	0	1	1	7
8/08/2022	2	2	4	4	5	1	4	4	2	1	1	6
9/08/2022	1	1	4	5	5	3	3	4	4	4	4	5
10/08/2022	3	2	5	3	6	3	3	4	4	6	6	4
11/08/2022	1	4	1	3	3	5	5	2	2	3	2	4
12/08/2022	3	2	0	6	7	1	2	4	3	3	5	4
13/08/2022	7	5	1	1	0	0	3	3	0	2	1	6
14/08/2022	1	3	1	4	2	1	3	2	0	2	1	7
15/08/2022	2	2	4	6	5	2	7	2	3	6	5	3
16/08/2022	1	4	5	3	5	2	3	1	6	3	3	2
17/08/2022	1	0	1	6	5	4	3	3	1	4	9	2
18/08/2022	2	2	5	4	6	3	6	4	1	2	5	5
19/08/2022	1	6	3	2	5	5	2	2	5	0	7	1
20/08/2022	2	2	2	3	2	3	3	2	3	4	1	4
21/08/2022	1	0	2	3	3	1	3	4	3	0	6	3
22/08/2022	2	1	3	6	4	3	5	5	2	2	7	4
23/08/2022	1	2	4	4	4	4	4	4	3	1	4	9
24/08/2022	2	2	4	5	7	1	1	5	4	6	3	3
25/08/2022	1	1	2	5	6	6	5	2	5	6	3	4
26/08/2022	1	1	4	6	3	3	2	2	5	6	5	4
27/08/2022	1	1	5	2	3	1	2	6	1	7	3	5
28/08/2022	2	0	2	3	2	1	2	1	1	1	3	3
29/08/2022	1	4	4	5	4	4	3	4	5	4	2	4
30/08/2022	1	3	2	2	3	3	3	6	3	5	5	5
31/08/2022	0	2	4	3	5	2	3	4	5	3	5	0
<b>Total</b>	<b>58</b>	<b>65</b>	<b>94</b>	<b>126</b>	<b>124</b>	<b>84</b>	<b>94</b>	<b>110</b>	<b>88</b>	<b>100</b>	<b>110</b>	<b>120</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/08/2022	6	7	2	2	4	2	5	3	2	3	4	0
2/08/2022	5	5	4	7	5	1	3	4	5	1	2	2
3/08/2022	4	3	3	4	8	2	2	2	3	1	1	1
4/08/2022	3	3	6	8	6	2	0	2	2	4	1	1
5/08/2022	3	2	3	4	2	7	1	3	2	0	2	0
6/08/2022	4	3	2	3	2	2	1	2	2	0	4	0
7/08/2022	2	2	1	2	0	1	4	1	1	1	0	1
8/08/2022	0	4	2	7	2	4	1	1	1	4	3	1
9/08/2022	5	2	4	3	5	4	4	3	0	3	3	1
10/08/2022	3	7	3	2	5	0	2	4	0	0	4	1
11/08/2022	5	4	3	6	2	2	6	2	2	1	5	2
12/08/2022	3	2	1	7	3	4	4	1	2	3	1	2
13/08/2022	3	4	1	1	1	0	3	3	2	2	1	1
14/08/2022	3	3	2	2	1	2	1	2	1	3	3	0
15/08/2022	3	2	3	4	4	4	1	5	3	3	1	1
16/08/2022	4	1	2	5	5	3	0	2	2	3	4	1
17/08/2022	2	5	5	5	4	3	1	2	5	2	4	1
18/08/2022	5	1	4	3	2	2	2	2	2	0	4	1
19/08/2022	3	4	5	4	3	4	2	1	2	0	2	2
20/08/2022	2	5	2	2	1	0	2	3	2	1	2	0
21/08/2022	3	5	2	2	2	4	0	3	1	4	1	0
22/08/2022	4	4	2	8	3	3	2	1	2	3	5	0
23/08/2022	2	4	2	6	2	3	5	2	2	4	5	1
24/08/2022	2	4	4	4	2	5	1	3	1	4	3	1
25/08/2022	2	4	5	6	5	5	3	2	2	3	1	1
26/08/2022	2	6	2	3	5	3	1	2	1	1	3	0
27/08/2022	1	2	1	1	3	0	1	1	0	2	0	1
28/08/2022	3	4	3	1	2	1	2	0	3	0	2	1
29/08/2022	4	6	8	2	6	0	2	6	3	2	3	0
30/08/2022	4	4	4	7	4	2	0	3	4	1	3	0
31/08/2022	4	7	4	2	4	2	5	3	1	4	1	1
<b>Total</b>	<b>99</b>	<b>119</b>	<b>95</b>	<b>123</b>	<b>103</b>	<b>77</b>	<b>67</b>	<b>74</b>	<b>61</b>	<b>63</b>	<b>78</b>	<b>25</b>



## REPORTING PERIOD: September

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	13	13	25	14	17	21	24	23	22	14	18	20
Bay 2	16	10	24	16	23	18	26	26	32	24	22	26
Bay 3	30	31	23	32	31	28	29	31	34	34	33	35
Bay 4	24	16	23	21	21	23	25	22	16	23	20	28
<b>Total</b>	<b>83</b>	<b>70</b>	<b>95</b>	<b>83</b>	<b>92</b>	<b>90</b>	<b>104</b>	<b>102</b>	<b>104</b>	<b>95</b>	<b>93</b>	<b>109</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	28	20	25	26	16	16	11	11	10	12	7	7
Bay 2	29	28	20	26	14	12	17	13	10	7	9	4
Bay 3	33	36	34	27	32	26	28	21	21	20	23	6
Bay 4	26	22	24	24	21	18	20	10	15	12	10	5
<b>Total</b>	<b>116</b>	<b>106</b>	<b>103</b>	<b>103</b>	<b>83</b>	<b>72</b>	<b>76</b>	<b>55</b>	<b>56</b>	<b>51</b>	<b>49</b>	<b>22</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/09/2022	4	2	5	4	7	4	1	4	7	2	2	4
2/09/2022	3	2	4	3	4	2	3	0	8	4	4	4
3/09/2022	5	2	1	2	4	1	2	4	1	4	2	1
4/09/2022	3	1	1	0	3	4	1	1	1	2	2	3
5/09/2022	0	4	5	4	4	4	3	6	3	4	5	6
6/09/2022	3	2	5	1	4	0	5	3	3	5	5	5
7/09/2022	2	3	4	2	4	3	4	2	4	3	3	2
8/09/2022	5	3	2	2	2	6	4	5	5	4	4	4
9/09/2022	4	2	3	1	6	2	3	3	3	3	4	0
10/09/2022	5	0	3	3	2	5	4	2	3	0	3	2
11/09/2022	4	0	2	2	0	4	4	1	2	2	4	4
12/09/2022	2	4	4	3	2	3	4	6	3	4	1	6
13/09/2022	2	3	2	7	2	0	3	2	3	5	2	4
14/09/2022	2	4	1	1	3	3	2	3	2	2	2	2
15/09/2022	4	2	4	2	1	5	3	6	6	3	6	4
16/09/2022	5	4	2	2	1	4	6	3	5	4	4	4
17/09/2022	4	1	1	3	2	3	2	1	3	1	2	3
18/09/2022	1	2	4	3	4	2	0	5	1	2	2	2
19/09/2022	1	4	4	5	3	3	4	3	4	4	3	7
20/09/2022	1	4	4	3	2	3	7	4	4	4	5	4
21/09/2022	3	2	4	3	4	1	8	6	3	3	4	3
22/09/2022	4	2	4	3	3	3	0	8	4	5	0	2
23/09/2022	2	1	7	1	4	5	5	2	4	4	4	4
24/09/2022	5	1	4	2	3	7	2	1	3	1	3	7
25/09/2022	1	1	2	4	1	1	4	0	1	4	2	5
26/09/2022	1	5	3	1	3	3	8	5	5	4	4	4
27/09/2022	1	3	2	4	6	5	4	4	3	2	4	4
28/09/2022	2	1	1	5	3	1	4	3	2	6	1	1
29/09/2022	1	3	2	3	3	1	3	2	3	2	4	3
30/09/2022	3	2	5	4	2	2	1	7	5	2	2	5
1/10/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>83</b>	<b>70</b>	<b>95</b>	<b>83</b>	<b>92</b>	<b>90</b>	<b>104</b>	<b>102</b>	<b>104</b>	<b>95</b>	<b>93</b>	<b>109</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/09/2022	5	3	7	3	4	4	4	3	1	1	1	2
2/09/2022	3	4	2	3	4	3	2	3	0	3	1	1
3/09/2022	3	4	1	4	5	0	2	3	0	2	2	0
4/09/2022	4	3	3	1	1	3	3	2	1	4	1	2
5/09/2022	3	1	6	5	0	1	2	3	2	0	3	1
6/09/2022	3	5	5	4	3	0	2	0	3	2	2	1
7/09/2022	1	6	6	4	0	2	2	1	1	3	0	1
8/09/2022	3	6	4	4	1	3	3	2	0	2	2	1
9/09/2022	5	4	2	5	2	1	2	4	2	0	1	1
10/09/2022	5	3	4	3	1	2	3	1	2	1	0	0
11/09/2022	5	2	2	0	3	1	1	1	4	2	1	0
12/09/2022	6	3	3	2	4	4	2	0	4	1	1	2
13/09/2022	4	4	6	6	2	3	1	2	2	1	3	1
14/09/2022	5	4	4	3	6	2	3	1	0	2	5	1
15/09/2022	2	3	3	3	1	2	3	5	2	1	1	1
16/09/2022	4	1	4	3	2	4	2	2	2	1	4	0
17/09/2022	3	2	2	3	2	0	1	3	1	2	1	0
18/09/2022	4	3	4	1	1	3	1	1	1	1	1	0
19/09/2022	1	5	3	2	2	2	1	3	4	2	0	0
20/09/2022	7	8	2	4	3	3	2	0	3	3	2	0
21/09/2022	7	1	2	7	2	3	1	1	2	0	0	1
22/09/2022	5	4	4	3	3	3	3	0	2	2	3	1
23/09/2022	4	5	3	3	4	3	3	2	5	1	1	0
24/09/2022	1	2	2	4	2	3	1	3	2	0	2	0
25/09/2022	1	2	1	1	2	1	3	0	3	2	2	0
26/09/2022	8	6	4	2	7	6	5	2	2	2	3	3
27/09/2022	5	4	4	4	6	6	6	0	2	5	1	1
28/09/2022	5	3	4	6	4	2	4	1	1	3	4	0
29/09/2022	4	1	2	5	2	1	7	2	2	1	0	1
30/09/2022	0	4	4	5	4	1	1	4	0	1	1	0
1/10/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>116</b>	<b>106</b>	<b>103</b>	<b>103</b>	<b>83</b>	<b>72</b>	<b>76</b>	<b>55</b>	<b>56</b>	<b>51</b>	<b>49</b>	<b>22</b>



# REPORTING PERIOD: October

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	8	18	19	23	12	17	23	20	18	20	17	28
Bay 2	11	10	13	20	18	16	24	23	21	14	17	21
Bay 3	29	20	30	28	27	32	30	29	28	26	20	29
Bay 4	21	20	21	28	17	28	25	23	21	22	19	27
<b>Total</b>	<b>69</b>	<b>68</b>	<b>83</b>	<b>99</b>	<b>74</b>	<b>93</b>	<b>102</b>	<b>95</b>	<b>88</b>	<b>82</b>	<b>73</b>	<b>105</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	24	18	23	16	23	14	14	6	11	10	8	2
Bay 2	25	19	22	15	18	7	8	11	6	7	7	4
Bay 3	30	33	31	30	25	23	25	21	14	18	14	5
Bay 4	27	26	26	21	24	18	15	15	12	20	12	6
<b>Total</b>	<b>106</b>	<b>96</b>	<b>102</b>	<b>82</b>	<b>90</b>	<b>62</b>	<b>62</b>	<b>53</b>	<b>43</b>	<b>55</b>	<b>41</b>	<b>17</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/10/2022	0	2	6	2	1	3	5	5	1	2	1	3
2/10/2022	1	2	0	6	3	3	1	2	5	1	1	3
3/10/2022	3	1	2	5	4	3	4	3	1	1	3	6
4/10/2022	3	3	1	3	5	8	5	3	5	6	0	6
5/10/2022	4	0	2	3	0	2	5	3	1	5	5	3
6/10/2022	6	2	5	3	3	0	4	1	3	3	4	4
7/10/2022	3	3	3	1	2	3	1	4	6	4	3	2
8/10/2022	6	0	1	3	2	3	2	2	0	3	3	2
9/10/2022	3	5	3	0	2	1	3	4	1	1	2	1
10/10/2022	0	4	3	5	6	4	4	2	2	6	4	2
11/10/2022	2	3	5	4	2	3	5	4	5	3	3	4
12/10/2022	0	3	7	5	2	1	5	4	5	4	4	2
13/10/2022	1	4	1	5	3	3	7	4	1	1	2	5
14/10/2022	1	3	3	2	5	2	1	1	5	1	4	1
15/10/2022	2	3	2	3	2	2	1	4	2	1	3	2
16/10/2022	1	0	1	1	1	3	1	2	3	1	5	6
17/10/2022	2	1	4	3	3	4	4	3	4	3	3	4
18/10/2022	4	1	3	5	3	6	7	2	4	1	2	5
19/10/2022	1	1	1	4	4	2	0	4	2	4	2	5
20/10/2022	2	2	2	5	2	4	4	0	2	4	2	4
21/10/2022	4	0	4	1	2	4	2	2	4	1	2	1
22/10/2022	3	0	2	3	1	1	2	2	2	3	0	3
23/10/2022	2	2	1	3	1	2	1	1	1	2	1	3
24/10/2022	1	3	1	5	3	3	3	4	2	1	0	2
25/10/2022	2	3	2	3	1	3	5	7	2	2	2	4
26/10/2022	2	1	3	2	1	3	4	5	6	3	3	2
27/10/2022	2	2	4	3	2	4	6	3	5	1	6	2
28/10/2022	2	5	1	4	3	2	4	2	3	5	3	3
29/10/2022	2	3	3	3	0	3	3	3	1	4	0	5
30/10/2022	1	4	3	1	2	2	0	5	2	2	0	4
31/10/2022	3	2	4	3	3	6	3	4	2	3	0	6
<b>Total</b>	<b>69</b>	<b>68</b>	<b>83</b>	<b>99</b>	<b>74</b>	<b>93</b>	<b>102</b>	<b>95</b>	<b>88</b>	<b>82</b>	<b>73</b>	<b>105</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/10/2022	2	4	3	4	2	1	1	3	1	1	1	2
2/10/2022	4	4	4	2	0	2	3	1	1	0	1	2
3/10/2022	0	2	2	1	2	6	1	2	2	3	2	0
4/10/2022	7	4	4	6	3	2	6	2	0	3	0	2
5/10/2022	4	4	4	4	3	1	4	1	2	2	0	0
6/10/2022	5	6	2	4	3	2	4	1	1	4	2	1
7/10/2022	6	3	2	2	3	3	5	0	0	1	2	0
8/10/2022	2	4	1	2	2	0	1	2	2	1	0	0
9/10/2022	6	2	0	1	2	2	0	2	0	1	0	0
10/10/2022	5	2	2	4	4	3	2	2	4	2	2	0
11/10/2022	3	2	5	4	4	4	2	4	3	3	2	0
12/10/2022	3	3	6	6	6	2	4	2	2	3	4	0
13/10/2022	5	3	2	4	2	2	1	0	2	1	2	2
14/10/2022	4	3	3	1	5	1	2	0	0	1	1	2
15/10/2022	5	2	4	3	3	2	1	3	1	2	1	1
16/10/2022	0	3	3	0	2	0	1	2	1	1	1	1
17/10/2022	4	4	2	4	7	5	2	2	5	0	7	0
18/10/2022	5	3	4	6	2	3	4	3	3	2	4	1
19/10/2022	6	6	3	2	2	2	5	2	2	1	1	0
20/10/2022	1	1	2	3	3	0	0	2	0	4	1	0
21/10/2022	1	4	4	1	2	2	0	3	1	2	0	1
22/10/2022	1	4	2	1	2	1	0	2	0	1	1	0
23/10/2022	3	1	2	1	1	1	0	1	0	1	1	0
24/10/2022	1	4	3	1	4	0	1	2	2	1	0	0
25/10/2022	4	3	5	1	4	1	2	0	3	2	0	1
26/10/2022	3	1	6	5	3	5	3	0	0	4	1	0
27/10/2022	3	0	8	2	6	2	1	1	2	2	2	0
28/10/2022	3	4	3	3	2	1	2	1	1	0	1	1
29/10/2022	3	4	5	3	1	2	3	4	0	2	0	0
30/10/2022	4	3	3	0	1	2	0	3	1	1	0	0
31/10/2022	3	3	3	1	4	2	1	0	1	3	1	0
<b>Total</b>	<b>106</b>	<b>96</b>	<b>102</b>	<b>82</b>	<b>90</b>	<b>62</b>	<b>62</b>	<b>53</b>	<b>43</b>	<b>55</b>	<b>41</b>	<b>17</b>





# REPORTING PERIOD: November

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	13	19	21	23	16	16	20	24	22	17	16	20
Bay 2	12	10	18	16	17	22	22	24	25	20	15	20
Bay 3	25	22	32	31	25	33	36	30	36	24	23	34
Bay 4	27	21	29	25	28	21	34	31	20	24	20	30
<b>Total</b>	<b>77</b>	<b>72</b>	<b>100</b>	<b>95</b>	<b>86</b>	<b>92</b>	<b>112</b>	<b>109</b>	<b>103</b>	<b>85</b>	<b>74</b>	<b>104</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	22	33	24	16	22	13	16	12	9	9	10	4
Bay 2	23	30	24	25	14	8	16	4	3	8	3	0
Bay 3	38	37	34	26	30	24	25	24	17	19	18	7
Bay 4	27	35	28	24	20	20	20	20	14	15	13	4
<b>Total</b>	<b>110</b>	<b>135</b>	<b>110</b>	<b>91</b>	<b>86</b>	<b>65</b>	<b>77</b>	<b>60</b>	<b>43</b>	<b>51</b>	<b>44</b>	<b>15</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
1/11/2022	0	2	3	2	2	1	1	3	6	2	4	3
2/11/2022	0	3	3	1	2	2	2	6	1	2	0	5
3/11/2022	1	1	5	1	1	4	2	3	5	3	4	4
4/11/2022	0	1	4	3	2	4	5	1	3	2	4	3
5/11/2022	2	1	2	2	3	3	5	0	1	1	3	5
6/11/2022	2	2	2	1	0	3	3	1	2	3	1	4
7/11/2022	2	2	1	4	4	2	5	3	4	2	0	0
8/11/2022	2	2	4	5	4	4	2	5	5	5	3	3
9/11/2022	2	4	0	7	5	6	6	4	3	2	4	3
10/11/2022	4	3	3	4	4	3	9	4	4	0	7	6
11/11/2022	4	1	4	4	5	1	3	3	6	2	2	5
12/11/2022	3	3	4	3	1	3	1	4	1	1	1	3
13/11/2022	2	1	2	3	1	3	2	1	3	3	1	3
14/11/2022	3	2	2	4	4	1	3	3	5	2	1	1
15/11/2022	3	0	5	4	4	0	4	5	1	7	4	3
16/11/2022	2	4	4	2	1	2	5	6	1	4	1	5
17/11/2022	2	5	5	0	3	5	3	5	4	2	3	5
18/11/2022	4	1	3	2	5	6	6	1	6	5	3	4
19/11/2022	3	1	4	2	1	4	3	2	2	2	1	3
20/11/2022	4	3	0	3	1	2	3	2	1	2	3	2
21/11/2022	5	4	2	3	5	4	4	6	4	4	2	4
22/11/2022	3	4	6	5	4	1	3	5	5	3	5	4
23/11/2022	4	0	4	3	3	5	5	5	1	6	4	5
24/11/2022	2	1	8	3	6	2	5	6	5	3	2	3
25/11/2022	3	5	4	3	4	3	3	4	5	4	3	2
26/11/2022	5	1	5	6	0	1	3	3	1	1	1	3
27/11/2022	3	2	1	1	0	4	4	3	1	0	0	3
28/11/2022	3	3	2	2	5	3	7	3	6	3	3	5
29/11/2022	1	5	5	4	2	4	2	7	6	7	2	1
30/11/2022	3	5	3	8	4	6	3	5	5	2	2	4
1/12/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>77</b>	<b>72</b>	<b>100</b>	<b>95</b>	<b>86</b>	<b>92</b>	<b>112</b>	<b>109</b>	<b>103</b>	<b>85</b>	<b>74</b>	<b>104</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
1/11/2022	4	6	5	3	3	2	3	2	1	1	1	0
2/11/2022	2	2	2	3	3	1	0	2	1	2	1	1
3/11/2022	1	4	4	4	3	2	3	1	2	1	2	1
4/11/2022	2	3	1	4	5	2	2	3	2	2	0	1
5/11/2022	4	3	2	0	2	5	2	1	0	1	1	1
6/11/2022	3	2	2	0	2	2	1	2	2	0	1	0
7/11/2022	4	4	6	3	2	1	4	1	1	1	2	1
8/11/2022	2	2	6	5	7	3	0	3	0	3	2	0
9/11/2022	5	3	4	3	5	5	5	2	1	2	1	1
10/11/2022	4	6	4	3	4	4	2	2	2	0	3	0
11/11/2022	4	7	1	6	5	1	4	3	0	5	0	0
12/11/2022	5	2	3	2	1	2	2	1	1	1	1	0
13/11/2022	6	3	4	0	1	1	3	3	1	0	2	0
14/11/2022	7	6	3	1	2	3	3	2	0	4	2	0
15/11/2022	0	5	4	2	3	1	4	1	2	3	1	1
16/11/2022	4	7	5	4	3	3	3	0	2	1	0	2
17/11/2022	4	7	1	5	3	4	4	3	0	3	1	0
18/11/2022	3	1	9	1	5	2	1	1	2	5	1	0
19/11/2022	4	5	2	3	2	0	2	2	1	0	0	2
20/11/2022	4	4	3	1	2	1	3	0	2	2	1	0
21/11/2022	3	10	7	2	2	1	2	3	2	0	2	0
22/11/2022	5	7	3	6	2	3	3	2	2	2	4	0
23/11/2022	2	4	4	6	2	1	5	4	1	1	3	2
24/11/2022	5	5	6	4	3	2	3	3	0	3	1	0
25/11/2022	6	3	3	4	4	1	2	1	4	1	1	0
26/11/2022	2	5	2	1	1	2	1	3	0	1	1	1
27/11/2022	4	6	1	0	1	1	5	2	3	1	0	0
28/11/2022	3	4	4	6	1	3	4	1	2	1	3	1
29/11/2022	6	4	4	2	2	4	0	4	1	2	3	0
30/11/2022	2	5	5	7	5	2	1	2	5	2	3	0
1/12/2022	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>110</b>	<b>135</b>	<b>110</b>	<b>91</b>	<b>86</b>	<b>65</b>	<b>77</b>	<b>60</b>	<b>43</b>	<b>51</b>	<b>44</b>	<b>15</b>



## REPORTING PERIOD: December

Bay Occupancy Data

Start	12:00:00 AM	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
Bay 1	16	14	20	21	26	21	19	20	23	25	21	19
Bay 2	14	13	24	20	28	20	23	31	26	23	15	23
Bay 3	20	26	35	31	30	32	28	32	30	29	30	29
Bay 4	26	23	32	28	34	30	22	32	32	22	22	30
<b>Total</b>	<b>76</b>	<b>76</b>	<b>111</b>	<b>100</b>	<b>118</b>	<b>103</b>	<b>92</b>	<b>115</b>	<b>111</b>	<b>99</b>	<b>88</b>	<b>101</b>

Start	12:00:00 PM	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
Bay 1	19	27	30	25	24	12	19	10	11	14	15	3
Bay 2	23	29	28	30	18	21	16	9	13	11	11	1
Bay 3	34	33	45	34	28	18	21	24	21	19	19	7
Bay 4	29	35	37	31	21	26	24	18	19	16	14	6
<b>Total</b>	<b>105</b>	<b>124</b>	<b>140</b>	<b>120</b>	<b>91</b>	<b>77</b>	<b>80</b>	<b>61</b>	<b>64</b>	<b>60</b>	<b>59</b>	<b>17</b>

Traffic Movement Assessment Data

Start	00:00 to 01:00	01:00 to 02:00	02:00 to 03:00	03:00 to 04:00	04:00 to 05:00	05:00 to 06:00	06:00 to 07:00	07:00 to 08:00	08:00 to 09:00	09:00 to 10:00	10:00 to 11:00	11:00 to 12:00
Finish	1:00:00 AM	2:00:00 AM	3:00:00 AM	4:00:00 AM	5:00:00 AM	6:00:00 AM	7:00:00 AM	8:00:00 AM	9:00:00 AM	10:00:00 AM	11:00:00 AM	12:00:00 PM
31/12/2022	1	0	5	1	4	6	1	2	1	1	1	0
1/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
2/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
3/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
4/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
5/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
6/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
7/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
8/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
9/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
10/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
11/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
12/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
13/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
14/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
15/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
16/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
17/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
18/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
19/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
20/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
21/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
22/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
23/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
24/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
25/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
26/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
27/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
28/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
29/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
30/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

Start	12:00 to 13:00	13:00 to 14:00	14:00 to 15:00	15:00 to 16:00	16:00 to 17:00	17:00 to 18:00	18:00 to 19:00	19:00 to 20:00	20:00 to 21:00	21:00 to 22:00	22:00 to 23:00	23:00 to 24:00
Finish	1:00:00 PM	2:00:00 PM	3:00:00 PM	4:00:00 PM	5:00:00 PM	6:00:00 PM	7:00:00 PM	8:00:00 PM	9:00:00 PM	10:00:00 PM	11:00:00 PM	12:00:00 AM
31/12/2022	4	4	3	1	0	1	2	1	2	1	1	1
1/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
2/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
3/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
4/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
5/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
6/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
7/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
8/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
9/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
10/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
11/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
12/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
13/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
14/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
15/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
16/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
17/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
18/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
19/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
20/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
21/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
22/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
23/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
24/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
25/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
26/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
27/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
28/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
29/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
30/01/2023	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>

# **Appendix E**

## **Incident Register**



Date of event	Unique ID	Type of event:	Type of incident:	Severity of event:	Reportable / notifiable?	Describe what happened:
2022-01-01 T15:38	EVN-01141	Incident	Other	0 Minor	No	External Traffic Area: Contacted by Koppers employee with security concern with a female loitering outside of Stolthaven & Koppers booster plant premises. Koppers also informed Liberty Onesteel security. Site Manager logged into site CCTV, woman appeared to be waiting for vehicle to load in bay 3.
2022-01-03 T09:40	EVN-01142	Incident	Other	0 Minor	No	External Traffic Area: Received a call from Security Manager at Liberty Onesteel & advised that a large group of media were going to the Stolthaven terminal, as informed by the gatehouse security guard. Site Manager logged into site CCTV & noted 40-50 people congregating outside of the Mayfield 7 Berth. Confirmed with General Mngr via SMS that there was no known media release.
2022-01-15 T03:00	EVN-01173	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Vehicle loading in Bay 4 completed loading A trailer and when driver went to move vehicle forward for B trailer loading found that vehicle had a mechanical / electrical issue. Site staff informed / called out to attend whilst mechanics / recovery were organised. Once staff and recovery team were at site vehicle was eventually removed. Issue later found to be faulty battery on prime mover.
2022-01-19 T08:30	EVN-01181	Near Miss	N/Ap	N/Ap		Office building: At some point in the early hours of the morning the Telstra network for all site mobile phones (Duty Mobile - Emerg Contact), Site Manager, Site Supt, Autodialer (tank alarms etc) were disconnected from the Telstra network. No warning issued by Telstra prior disconnection, advice text sent to active numbers. Issue not noted until Site Supt got text message via wifi connection from other companies saying they couldn't reach anyone by phone at approx 08:30hrs. No indications on any of company mobiles that there was an issue. HQ confirmed accounts issue with Telstra & network re-established around 09:00hrs
2022-01-25 T15:58	EVN-01207	Near Miss	N/Ap	N/Ap		Tank (primary containment): Whilst discharging from tankship BOWFIN into tanks NN6 and slow filling tank NN7 tank gauging alarmed at 15:58hrs 25 Jan with tank NN7 at 5.347m (remaining ullage of approx 2,600kls) which showed high temp, API Tables error, loss of flow rate, hi level alarm. Shore officer immediately notified ship to reduce pressure and redirected discharge to NN6 only and then opened into secondary tank NN5 (already predipped for discharge) and discontinued discharge to tank NN7. Discharge plan amended to eliminate tank NN7. Gauging returned to normal after approx 5 minutes but elected to remove NN7 from discharge plan and closed up tank pending further investigation by Haz Area electrician and Emersons. Possible temp probe string issue.
2022-01-26 T07:00	EVN-01208	Incident	Damage / Malfunction	0 Minor	No	Tank (primary containment): During discharge of tankship BOWFIN the solenoid on air actuated inlet valve for NN6 failed / went into fault whilst closing tank to allow Stadis dosing of tank NN5 (shared common inlet line). Valve was closed by Shore Officer manually - suspected sticking solenoid. Recycled valve to open position but failed again 26 Jan during testing. Solenoid written up for replacement post tankship.
2022-02-01 T15:25	EVN-01234	Incident	Spill / Environmental Accident	0 Minor	No	Tank bund (secondary containment): A minor diesel leak was noted under the no.2 filtration chamber. Further investigation found that under the heat of the 38 degree day, thermal expansion had occurred between the two isolating gate valves and over pressurized, causing minor leaks on both the inlet and outlet isolation valves. Gate valves opened to relieve pressure. Flanges checked to ensure bolts were still tight. Spill cleaned up.
2022-01-21 T15:00	EVN-01245	Non-Conformance	N/Ap	N/Ap		Office building: Whilst searching for Rapid Antigen Test kits for the Newcastle Terminal (normal suppliers were out of stock and long lead time) an available bulk stock was located with Clinical Supplies in Sydney . Website appeared legitimate with multiple endorsements by major organisations & multiple state portals and legitimate looking shopping cart with a selection of masks, anti bacterial wipes and RAT kits. Site Supt used personal Visa card to purchase 40 test kits at a value of AUD\$630. Receipt was issued confirming order & this was submitted as an expenses claim for NTL. Notification was received on 20/1 that order had shipped via a legitimate courier company. This shipping tracker app showed order shipped but tracking never progressed. Subsequent emails, calls & online web submissions to Clinical Supplies went unanswered.
2022-02-11 T16:00	EVN-01256	Incident	Damage / Malfunction	0 Minor	No	Office building: Approx 16:00hrs 11th Feb severe storm and lightening front transited the Newcastle area for a period of approx 50 mins with several close lightening strikes around the Port area. Site experienced two power outages that tripped / shutdown product pumps (gantry service), compressor sets, air dryer, pump VSD's, lights, drivers printers, customer printers, Fuels Manager PC & multiple alarm trips.
2022-02-22 T03:17	EVN-01283	Incident	Damage / Malfunction	0 Minor	No	Site ESD activated due to momentary loss of power. Lightning activity noticed by drivers in far distance at the time of incident. On-call attended to reset alarms and reboot operations.
2022-02-21 T01:51	EVN-01284	Incident	Damage / Malfunction / Reputational Damage	0 Minor	No	Stolthaven carriers impacted by significant delays at railway crossing on Steelworks Road. Up to 41 minute delay recorded. This was caused by the train driver stopping inside the predictor circuit loop and uncouples rear units (standard operation). Driver believed he was outside of the circuit loop. Complaint made by Infrabuild to Pacific National, detailing the impacted times and non-compliances noted from CCTV footage.
2022-03-02 T09:00	EVN-01309	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Remote Impound Basin (RIB) pump (waste water) suffered gearbox shaft failure. Removed from service and replacement part ordered.
2022-03-15 T07:30	EVN-01332	Near Miss	N/Ap	N/Ap		Truck bay: Driver loading in Bay 3 at 01:30hrs 15 Mar was spotted in CCTV review not following procedure. Failed to drain dry / follow switch loading procedures on both A & B trailers, did not attach scully (earthing) until after he'd connected load arms. Repeated process on B trailer.
2022-03-24 T01:40	EVN-01362	Non-Conformance	N/Ap	N/Ap		Truck bay: Random post loading driver audit (review of CCTV) identified driver breached Site & SLP loading procedures. Non compliances noted: 1. Compartments on A & B trailer were not drained prior to loading; 2. Vapour hose was connected before overfill protection (earthing); 3. Bonding cables not used on drip trays; and 4. Overfill protection removed before vapour hose Site Manager raised with carrier. Notice issued to all drivers that random audit checks are underway.
2022-03-27 T11:31	EVN-01373	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Notified by Driver that "high temp alarms" had been experienced during diesel loading in bay 2. Loading was unable to be completed on the B trailer. Bay 2 closed out and BoL pushed through so loading could be completed in Bay 1 (filtered product.) Further investigation to be completed during normal business hours.

Date of event	Unique ID	Type of event:	Type of incident:	Severity of event:	Reportable / notifiable?	Describe what happened:
2022-04-10 T16:00	EVN-01399	Non-Conformance	N/Ap	N/Ap		Jetty: Vessel AG NEPTUNE an LR class tanship arrived at Mayfield 7, Newcastle (All Fast 14:12hrs - 10 April 2022) with 75,045kls diesel for discharge to comingled stock. Samples were taken from ships tanks 1W through to 6W, for the purpose of pre-discharge testing. Following independent testing all samples failed to meet the NTL Commingling Specification. No discharge of cargo to shore was permitted.
2022-04-19 T06:00	EVN-01414	Incident	Damage / Malfunction	0 Minor	No	Office building: Aircon failure to control room. Call for sevice technician to fault find Identifies faulty compressor (unit circa 8 yrs + old)
2022-04-22 T15:10	EVN-01418	Incident	Other	0 Minor	No	External Traffic Area: Carrier vehicle transiting Steelworks Road inbound to the Terminal suffered a catastrophic mechanical compressor failure dropping oil and metal fragments on roadway approx 100m from Terminal entrance. Driver / mechanics contacted Terminal staff to assist. Terminal staff x 2 assisted with oil dry products , waste recovery bags and biodegradeable citrus based cleaner working alongside driver and mechanics with their own spill recovery gear. Carrier mechanics towed the truck combination back to allow full cleaning of roadway surface under truck and kerbing. No oil entered drains and all was recovered on spills pads and soaked with oil dry product.
2022-05-06 T15:30	EVN-01457	Non-Conformance	N/Ap	N/Ap		Jetty: All Diesel pre-discharge samples ex Hua Lin Wan (2W/3W/5W/6W) had free water droplets present. Ships sampler was cleaned by Surveyor / crew & samples were re-taken. Further results found water still present & failed to meet the Stolthaven Commingling specification for appearance & water / particles. All other results were on specification.
2022-05-08 T06:00	EVN-01458	Incident	Other	0 Minor	No	Jetty: During the Hua Lin Wan (LR2) berthing at Mayfield 7 berth, the Quick Release Hooks (QRH,) which have live load monitoring, alarmed multiple times due to high tonnage placed upon the berthing infrastructure. The QRH alarm for LR2 class vessel is set at 37mt, peak loading recorded during berthing was 84mt, note the QRH are rated for 100mt.
2022-05-07 T16:00	EVN-01462	Near Miss	N/Ap	N/Ap		Jetty: The LR class vessel HUA LIN WAN was discharging a diesel cargo at Newcastle from 06 May through to departure 08 May. On arrival, and in order to align the ships manifold safely with the shore manifold, it created a conflict with the ships main gangway and the capstan at QRH #6. Shore requested vessel to deploy the temporary gangway and land it between the fixed gangway and the ships manifold. As the the discharge was nearing completion approx 16:00hrs 07 May the duty Shore Officer attended the vessel for the purposes of performing a safety check and inspection of the ships deck / manifolds. The temporary alumium gangway was a flat design with corner edging welded onto a flat faced walkway offering approx 15-20mm of exposed edge as a foot tread - no anti slip. Due the design of the temporary gangway it was estimated that this gangway angle exceeded safe limits and was between 40-45 degrees from the side rail to the wharf. The Shore Officer considered this unsafe as descent off the ship would have been particularly hazardous. No onboard safety check was carried out in this instance and noted on SSSCL. Arrangments were made for the starboard main gangway to be lowered sufficiently for the pilot to board on the waterside from the pilot cutter for departure and a short term access using the main gangway landed temporarily between the rope rail and capstan to allow the disconnect crew and surveyor to board and disembark (approx 2 hrs). After disconnection all shore gangways were recovered on board in preparation for departure.
2022-05-13 T10:05	EVN-01475	Incident	Damage / Malfunction	0 Minor	No	Tank (primary containment) / Truck bay: Low and zero flow experienced in bay 3 during Diesel loading with load pump noise. Staff reviewed loading line up with no obvious issues found (no changes from previous loading). NN6 on to gantry supply with 3m head pressure. NN5 was opened to service the gantry which resulted in a larger surge down the outlet line. Staff attentively managed start up process and completed loading from NN5. Further review required.
2022-05-17 T21:45	EVN-01486	Non-Conformance	N/Ap	N/Ap		Jetty: Diesel discharge - Sunny Bay (MR), pre-discharge survey dips identified water in 1W, 2W, 5W, 6W (1 to 2mm.) All pre-discharge tests met commingling specification. Agreed to de-bottom all ships tanks into one shore tank for quarantining. Discharge resulted in prolonged periods of Hazy product during discharge requiring shore tank management for quarantining.
2022-05-23 T14:30	EVN-01507	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Informed by a driver of an issue with loading arm in bay 2. Upon inspection loading arm 3 could not be removed from the trucks rear compartment no 1. The terminal API coupling could be closed however would not disconnect from the truck. Truck internal valve & gantry supply valves (meter run) were closed. The loading arm flange post coupling was broken to allow draining of the truck run down pipe and loading arm. Once drained the operators manipulated the coupling to allow release. All product was contained and returned to slops. The terminal coupling was replaced as a precaution and the driver was informed to have external valve inspected.
2022-05-31 T06:00	EVN-01516	Incident	Damage / Malfunction	0 Minor	No	Site Wide: Terminal subject to Gale force winds overnight, impacting terminal cable tray covers, scaffolding structures and walkways (NN2 works). Staff reviewed/assessed the new site hazards and all available staff & contractors deployed to address the threats and reduce further damage.
2022-06-22 T14:39	EVN-01563	Incident	Damage / Malfunction	0 Minor	No	Office building: Terminal advised by carrier that an incorrect date was issued on Viva BoL. Further investigation found multiple loads were incorrectly displaying the previous days date. Varec contacted to review data files sent to Viva's JDE system
2022-07-13 T14:00	EVN-01620	Incident	Damage / Malfunction	0 Minor	No	During routine pipeline patrol for discharge of the Maersk Mississippi a keen eyed contractor noted that a cable tray run (vertical mount on side) attached to pipelinesupport frame was sagging at an intermediate section causing slight buckling of the cable tray lid. He inspected and found a broken weld on a support bracket on the underside (out of sight). Alerting the Duty Shore Officer a temporary ratchet was put in place to take some of the weight until a repair could be affected post shipping event.
2022-07-15 T18:50	EVN-01636	Non-Conformance	N/Ap	N/Ap		Jetty: LR2 vessel 'Torm Maren' berthed at Mayfield 7 to discharge cargo of diesel. Agent in the week prior supplied a completed and approved N20 ATD (Authority to Deal). This document is supplied by the Dept of Immigration and Border Protection and is the formal approval that is required prior discharge of cargo for imports. At approx 18:50hrs two Australian Border Force officers attended the vessel and queried the surveyors, who were sampling ships tanks for testing. The ABF officers insisted that prior removing any samples from the ship and additional ABF Form 44b (normally used for removal of ships spares / courier packs etc) must be lodged and approved. This was contested and agent contacted the ABF 24hr helpline. They were unable to assist. Given the late hour and delays being experienced it was decided between Shore Officer and Agent to lodge the requested Form 44b. Approx 90mins delay in samples being approved for removal to test room for analysis. Customer PQ representative was in attendance throughout and was able to witness proceedings. On completion of cargo operations the Shore Officer involved contacted ABF District Manager for clarification and an apology was issued by ABF to both Stolthaven and ships agent for the delay and incorrect advice imparted by their officers.
2022-07-27 T11:00	EVN-01657	Incident	Damage / Malfunction	0 Minor	No	Site Wide: Senior operator noticed the fire ASE panel located in the Fire pumphouse was abnormally flashing on all indication status. ADT (fire system monitoring) was contacted. ADT investigated & advised communications were down and arranged for a technician.
2022-07-27 T12:10	EVN-01658	Incident	Spill / Environmental Accident	0 Minor	No	Tank bund (secondary containment): During the daily walkaround, Senior Operator noted a spill at NN5 dewatering unit. On further inspection a leak had occurred on the dewatering system non-return valve.

Date of event	Unique ID	Type of event:	Type of incident:	Severity of event:	Reportable / notifiable?	Describe what happened:
2022-07-28 T14:42	EVN-01659	Non-Conformance	N/Ap	N/Ap		Truck bay: Whilst walking through the gantry, a mobile phone was heard ringing. All drivers in the bays were questioned and a driver in bay 3 admitted to having a phone in his pocket. Driver was given a warning on the spot and permission to access to the site was revoked for 2 weeks (drivers 2nd breach of site rules).
2022-08-01 T16:25	EVN-01674	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Driver loading B double combination in Bay 3. Completed loading and failed to remove one of two bonded drip trays on completion of final compartment. On departing the bay his B trailer rear axle combination ran over the bonded drip tray. Carrier has agreed to replace with new tray to Stolthaven design.
2022-08-26 T09:30	EVN-01727	Incident	Other	0 Minor	No	Jetty: At approx 09:30hrs during discharge of MR vessel 'St Michaelis' a radio exchange was over heard by Duty Shore Officer between Wharf Attendant and Security regarding someone accessing ship. It became apparent that Security were unaware of what the individual was visiting vessel for. Shore Officer immediately attended wharf, verified sign in sheet and ID credentials (Maritime Security Card Identification / Induction Card number) and checked against approved visitors list, cross referencing against manual induction records held at Gatehouse. Person that boarded vessel was not on the 'Approved Visitors' list and no current Stolthaven Induction record was located. SO boarded vessel to cross check ID against ships security log and found that person was Govt Inspector for Dept of Agriculture, Fisheries and Forestry. Previously inducted to site but his induction had expired in 2021 - verified against EcoPortal records and photo ID on file. Whilst DAFF Inspectors have right to board vessels they are obliged to follow our site induction rules. Inspector was requested to renew induction and SO contact DAFF for local contact to discuss renewing inductions of DAFF staff as previous manager has apparently retired. Security Guard re-educated that no-one allowed to access berth without being on approved list, inductions to be verified where relevant and to contact Duty SO by radio if unsure. Whilst not a security breach (as Inspector known to site and held current MSIC) it was a failure of the induction system checks (paper based) and verification process by security. Under our site MSP (Maritime Security Plan) only Australian Border Force, Defence Force Personnel and Law Enforcement officials are permitted access without prior approvals and induction requirements (in line with the Maritime Security and Offshore Facilities Act 2003 - MTOFSA)
2022-09-10 T22:00	EVN-01777	Non-Conformance	N/Ap	N/Ap		Jetty: During discharge of Galway Spirit, Diesel found to be hazy. Offspec product appearing in prolonged pockets throughout discharge. Discharge eventually stopped. Site Manager discussed plan with Surveyor to de-bottom all tanks (again.) Samples taken at Ships manifold, Letter of Protest issued by Stolt and Intertek. Received hazy product to be quarantined until PQ clearance issued. Commingling customers (including cargo owner) informed. Staff managed to short batch initial product without PQ issue (8 mill) and prevent sitewide stock out.
2022-09-27 T14:08	EVN-01847	Incident	Damage / Malfunction	0 Minor	No	Following the annual hydro test of the site's firewater ring main, it was noted the site's jockey pump was frequently running. Further investigation assumed that the pressure was leaking back via either a 14" or 2" check valves. Spares were urgently ordered and further investigation / replacement planned.
2022-09-27 T14:17	EVN-01848	Non-Conformance	N/Ap	N/Ap		Weather station alerted with high wind speed. Further investigation found that the station was displaying a constant high speed indicating an issue with the sensor. Service technician arranged to investigate further.
2022-10-04 T14:12	EVN-01868	Non-Conformance	N/Ap	N/Ap		Tank (primary containment) / Jetty: 4th Oct the LR tankship JAG LARA berthed at Mayfield 7 with cargo of approx 104,000kls diesel of which 58,420kls was to be discharged at Newcastle into commingled stock (RoB going to Gore Bay, Sydney). Cargo originated from Mailiao, Taiwan. Previous cargoes from this refinery have created product quality issues and our concerns had been brought to the attention of the customer. Discharge plan was to 'debottom' each ship's wings individually into a designated quarantine tank (as a precaution). Initial discharge showed upto 15-20mm of water in sample bottles with an ATSM Haze 6 rating when sampling with standard 1 ltr glass bottle. The 'debottoming' process ran for around 6 hours until we reached a point where product over all ships tanks (1W, 3W, 4W & 6W) was Haze 1. Periods of hazy product were noted during the discharge post debottoming ships tanks. This necessitated the Terminal double manning, extending shifts, requesting surveyor stay on board to sample at ships manifold. Significant impact for Terminal in co-ordinating advices to all commingling parties, post shipping dewatering of shore tanks has (at time of writing) generated over 10,800 ltrs of slops. This process has not yet been completed and we fully expect that figure to increase. With limited site slops capacity this has to be a carefully managed process. Customer has been given detailed log of observations and comments along with photos of water in manifold samples.
2022-10-26 T13:25	EVN-01902	Near Miss	N/Ap	N/Ap		Truck bay: During random SLP inspections of vehicles entering / loading at the gantry a prime mover was found to have an expired Safe Load Pass label. The trailers that were to be loaded were compliant but the prime mover / tractor unit, which was a last minute swap due a vehicle breakdown, had been exchanged from a Queensland depot and had not been inspected prior driver collecting from depot. The SLP label had expired in Sept '22. Vehicle was not permitted to load and removed from site.
2022-10-26 T11:20	EVN-01903	Near Miss	N/Ap	N/Ap		Jetty: On completion of discharge of the vessel 'Doric Courage' the pipeline from wharf to the Terminal was to be pigged clear. When the pig was launched from the wharf it was slow to leave to pig chamber and failed to activate the 'pig sig' device indicating it had left the chamber. After approx two minutes it was clear there was no pig movement (usually audible and with some vibrations accompanied by pressure surges with product surge in sightglass). Attending Shore Officer followed procedure SHNC-OPS-003.16 Section 5.3 and was able to dislodge pig after two attempts and safely clear the line and recover the pig at the Terminal pig receiver.
2022-11-02 T11:13	EVN-01920	Near Miss	N/Ap	N/Ap		Jetty: During the berthing of the FPMC P Ideal (LR2 class) a jet ski travelled at high speed between the vessel and Mayfield 7 berth. Vessel was estimated to be approx 10-15 meters away from berth fenders. Port of Newcastle Security Manager advised, & Water Police Notified. Stolthaven CCTV footage held for further investigation.
2022-11-03 T10:20	EVN-01925	Near Miss	N/Ap	N/Ap		Jetty: During discharge of FPMC P IDEAL at Mayfield 7 the wharf attendant spotted a red belly black snake of approx 1.5m length. It was located at the base of the wharf manifold stairs and subsequently moved under a wharf trolley supporting one of the wharf hoses. A professional snake handler / catcher was called and attended site approx 1hr after call-out. Discharge was suspended as the snake catcher arrived on the wharf at which point the snake was quickly caught and bagged for removal (taken off site). Discharge resumed without incident.
2022-11-20 T09:05	EVN-01982	Near Miss	N/Ap	N/Ap		Truck bay: Whilst Truck loading operations were being performed on Sunday 20th Nov, a driver noticed a large snake leaving the gantry area. Hills truck driver rang the duty mobile (on call) to inform terminal staff of the snake sighting. Duty on call staff member asked if all personnel on site at the time were safe and away from the immediate area of the snake. Duty staff member then dialed remotely into site CCTV cameras to pin point where the snake had moved to, but was unable to locate it once it moved away from the truck loading gantry.

Date of event	Unique ID	Type of event:	Type of incident:	Severity of event:	Reportable / notifiable?	Describe what happened:
2022-11-28 T15:00	EVN-02004	Incident	Damage / Malfunction	1 Minor	No	During 5 yearly fire hydrant replacement works it was suspected that the main 14" swing check valve was passing and not holding pressure. On completion of hydrant replacement works the system was bled of all air but the hydrant system jacking pump was unable to build pressure adequately and audible passing was noted at the main check valve. Site had spare 14" swing check valve in stock and we organised for the valve to be replaced and contractors returned next day to pressure test the hydrant ring main in accordance with 5 yearly requirements
2022-12-05 T10:30	EVN-02027	Incident	Other	0 Minor	No	Truck bay: Approx 10:30hrs in Bay 2 whilst connecting load arms on to his trailer the driver connected the scully plug (first on / last off - anti static and safe fill protection). This activation of this scully system sets in motion a deadman sequence timer which on first connection initiates an immediate strobe light indication followed by an audible alarm bell for that load bay. The driver who had not noted the strobe was startled when the bell activated and pushed the nearest button - in this case - a shrouded red button labelled 'Emergency Shutdown' and not the green open faced mushroom button labelled 'Deadman'. Site staff attended the Bay immediately and verified via radio there was no issue, a cross check of systems in the control room also verified that no abnormalities were present and we were OK to reset. The driver, was most apologetic and deeply embarrassed. The 1-2 minute delay in resetting the site systems only delayed one other truck loading in Bay 4. All site systems performed as expected.
2022-12-05 T07:45	EVN-02030	Near Miss	N/Ap	N/Ap		Traffic area: Bolts on Koppers gas line filter badly rusted and require replacement. Koppers gas line runs through the Stolthaven lease land, adjacent to the terminal (N/E access roadway).
2022-12-12 T10:00	EVN-02047	Near Miss	N/Ap	N/Ap	No	Jetty: During the pre-discharge leak test on the vessel Sambrani, 4 leak points were identified by the Wharf Attendant. Leaks were located: 1. Right-hand (Blue) manifold between the ships 16" manifold and ship's reducer; 2. Left-hand (Red) manifold between the ship's 16" manifold and ship's reducer; & 3. 2 x manifold 1" drain valves . Approx 1.5 hours of delay was recorded due to rectifications.
2022-12-12 T12:00	EVN-02049	Non-Conformance	N/Ap	N/Ap		Tank (primary containment) / Jetty: Throughout Diesel discharge exvessel Sembrani, the terminal experienced pressure surging. Pressure surge fluctuated approx 1.5 bar. A leak was identified on the wharf's bypass gate valve gland, which may have been attributed to the constant surge. Approx. 50ml to ground in bunded area.
2022-12-29 T04:00	EVN-02084	Incident	Damage / Malfunction	0 Minor	No	Truck bay: Early hours of 29 Dec driver loading in Bay 1 completed loading his A trailer. Pulled forward to load his B trailer and drove over two bonded drip trays that he had failed to remove. Driver noted incident in drivers book and also returned to Terminal later in shift to apologise in person. Replacement trays billed to carrier.

# **Appendix F**

**Conditions of Consent SSD\_7065**



Schedule B – General Administrative Conditions – Compliance Requirements		
No	Description	Statement of Compliance
B1.	<p><b>Obligation to Minimise Harm to the Environment</b></p> <p>In addition to meeting the specific performance criteria established under this consent, the Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the Development.</p>	Noted
B2.	<p><b>Terms of Consent</b></p> <p>The Applicant shall carry out the Development in accordance with the:</p> <p>a) State Significant Development Application SSD 7065;</p> <p>b) EIS and RTS;</p> <p>c) the plans and drawings at Appendix 1; and</p> <p>a) d) the Management and Mitigation Measures at Appendix 2.</p>	Noted
B3.	<p>If there is any inconsistency between the plans and documentation referred to in Condition B2 above, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.</p>	Noted
B4.	<p>The Applicant shall comply with any reasonable requirement(s) of the Secretary arising from the Department's assessment of:</p> <p>a) any reports, plans or correspondence submitted in accordance with this consent; and</p> <p>b) the implementation of any actions or measures contained in these documents.</p>	Noted
B5.	<p><b>Limits of Consent</b></p> <p>This consent lapses five years after the date from which it operates, unless the Development has physically commenced on the land to which the consent applies before the date on which the consent would otherwise lapse under Section 95 of the EP&amp;A Act.</p>	Noted, Physical commencement has been triggered.
B6	<p>The Applicant shall not increase the throughput of combustible liquids above 1,300 million litres (ML) per year until SSD 6664 has been surrendered in accordance with Condition B11, and an amended EPL has been issued for the Development. The Applicant shall provide a copy of the amended EPL to the Secretary prior to increasing throughput above 1,300 ML per year.</p>	No exceedance of annual throughput limits (refer to <b>Section 9.0</b> of this Annual Review)
B7	<p>Following the receipt of an amended EPL for the Development and the surrender of SSD 6664 in accordance with Condition B11, the Applicant shall:</p> <p>a) not receive, store and dispatch more than 3,500ML of flammable and combustible liquids on the Site per year; and</p> <p>b) ensure the storage capacity at the Site does not exceed 355.7 ML of flammable and combustible liquids at any one time.</p>	Noted (refer to <b>Table 2-3</b> of this Annual Review)
B8	<p>The Applicant shall not receive flammable liquids from the M4 berth at any time.</p>	No flammable liquids other than those specified in this condition were stored in bulk at the Site (refer to <b>Section 9.0</b> of this Annual Review)



## Schedule B – General Administrative Conditions – Compliance Requirements

No	Description	Statement of Compliance
B9	<p>Following the receipt of an amended EPL for the storage of additives on the Site, the Applicant may receive, store and use additives on Site in Intermediate Bulk Containers (IBCs) as described in the RTS, subject to implementation of the following measures, to the satisfaction of the Secretary:</p> <p>a) storage of additives in IBCs within a bund constructed in accordance with Australian Standard 1940-2004: The storage and handling of flammable and combustible liquids; and</p> <p>b) implementation of relevant safety procedures for fire safety and protection of personnel as required by Condition C4b).</p> <p>Note: If an amended EPL is not required for the storage of additives in IBCs on the Site, the Applicant may store and used additives in IBCs on the Site from the date of this consent, subject to satisfactory implementation of Conditions B9a) and B9b) above.</p>	MP 08_0130 has been surrendered.
B10	The Applicant shall not use more than 30,000 litres of additives from IBCs on the Site per year, until the vapour recovery unit is installed and commissioned in accordance with Conditions C15 and C16.	EPL last updated 31 January 2020
B11	<p><b>Other Consents and Approvals</b></p> <p>Prior to operation of the Development, or as otherwise agreed with the Secretary, the Applicant shall surrender development consent SSD 6664 for the Site in accordance with the EP&amp;A Regulation.</p> <p>Note: This requirement does not extend to the surrender of construction and occupation certificates for existing and proposed building works under Part 4A of the EP&amp;A Act. Surrender of a consent should not be understood as implying that works legally constructed under a valid consent can no longer be legally maintained or used.</p>	Noted
B12	Prior to the commencement of operation, the Applicant shall provide written evidence to the satisfaction of the Secretary, demonstrating the M7 berth has all relevant approvals and licenses to receive flammable and combustible liquids by ship.	A new pipeline connecting the terminal to Mayfield Berth No. 7 was built during the 2018 reporting period as per the requirements of SSD_7065. The pipeline is not subject to the requirements of the BCA. No new buildings were built during this reporting period. No other elements of the project as approved under SSD_7065 have subsequently been initiated.
B13	Nothing in this consent impacts on the following consents/approvals: a) PA 12/001 issued under Section 111 of the EP&A Act dated 20 February 2012; and b) DA 293-08-00 as modified issued under Section 80 of the EP&A Act dated 6 April 2001.	Noted
B14	<p><b>Mayfield Concept Plan</b></p> <p>The Applicant shall carry out the Development generally in accordance with the requirements of the Mayfield Concept Plan approval (09_0096), as modified.</p>	There was no construction of utility works during the reporting period.

Schedule B – General Administrative Conditions – Compliance Requirements

No	Description	Statement of Compliance
B15	Within six months of the commencement of operation, or as otherwise agreed with the PON, the Applicant shall decommission and remove the existing pipeline connection and associated infrastructure between the Site and the M4 berth, to the satisfaction of the PON. The Applicant shall provide a copy of the approval to undertake the demolition works and provide evidence of completion of the works, to the satisfaction of the Secretary.	The M4 pipeline has been removed in consultation with PON.
B16	<b>Statutory requirements</b> The Applicant shall ensure that all necessary 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.	A set of the sites operational environmental management plans were submitted and approval by DPIE prior to the installation of the Mayfield Berth No. 7 pipeline.
B17	<b>Structural adequacy</b> The Applicant shall ensure new buildings and structures, and alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.	Consent previously received.
B18	Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works. Part 8 of the EP&A Regulation sets out the requirements for the certification of the Development.	Paid
B19	<b>Protection of Public Infrastructure</b> The Applicant shall: a) repair, or pay the full costs associated with repairing public infrastructure that is damaged by the Development; and b) relocate, or pay the full costs associated with relocating public infrastructure that needs to be relocated as a result of the Development.	Noted
B20	<b>Utilities and services</b> Utilities, services and other infrastructure potentially affected by the construction and operation of the Development shall be identified prior to construction, to determine requirements for access to, diversion, protection, and/or support. Consultation with the relevant owner and/or provider of services that are likely to be affected by the Development shall be undertaken to make suitable arrangements for access to, diversion, protection, and/or support of the affected infrastructure as required. The cost of any such arrangements shall be borne by the Applicant.	Hazard audit was not required during the reporting period.
B21	<b>Operation of Plant and Equipment</b> The Applicant shall ensure plant and equipment used for the Development is: a) maintained in a proper and efficient condition; and b) operated in a proper and efficient manner.	Noted
B22	<b>Staged Submission of Plans or Programs</b> With the approval of the Secretary, the Applicant may: a) submit any strategy, plan or program required by this consent on a progressive basis; and/or b) combine any strategy, plan or program required by this consent.	Noted



Schedule B – General Administrative Conditions – Compliance Requirements

No	Description	Statement of Compliance
B23	<p><b>Development Contribution</b>                      Prior to operation of the Development, the Applicant shall pay Council \$228,600 in development contributions.</p> <p>Note: This contribution is subject to indexation to reflect quarterly variations in the Consumer Price Index All Group Index Number for Sydney, as published by the Australian Bureau of Statistics.</p>	A partial development contribution was paid to council during the previous reporting period for the operation of the new M7 pipeline where it falls within the consent area. The balance of contributions would be paid when the remainder of the consent (additional tankage and truck loading gantry) is constructed.
B24	<p><b>Dispute Resolution</b>                      In the event that a dispute arises between the Applicant and Council, PON or a public authority, in relation to a requirement under this consent, or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's determination of the dispute shall be final and binding on the parties.</p>	Noted
B25	<p><b>Compliance</b>                      The Applicant shall ensure that employees, contractors and sub-contractors are aware of, and comply with, the conditions of this consent relevant to their respective activities.</p>	Noted
B26	<p>The Applicant shall be responsible for environmental impacts resulting from the actions of all persons that it invites onto the Site, including contractors, sub-contractors and visitors.</p>	Noted

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C1.	<p><b>Hazards</b></p> <p>The Applicant shall implement:</p> <ul style="list-style-type: none"> <li>a) all control measures proposed in the PHA;</li> <li>b) all relevant actions, as listed in Appendix C of the PHA, in response to the recommendations from the Buncefield incident investigation report; and</li> <li>c) all recommendations of the PHA.</li> </ul>	Copy of site auditor correspondence previously provided.
C2.	<p>Prior to completion of detailed design of the Development, or within such further period as the Secretary may agree, the Applicant shall prepare a Surge Study for the Development. The Study shall:</p> <ul style="list-style-type: none"> <li>a) be prepared in consultation with SafeWork NSW;</li> <li>b) consider scenarios including, but not limited to, pump trips and operation of the dry break coupling on marine loading arms;</li> <li>c) take into account the maximum pumping and tank filling rates when evaluating the pressures that can occur in the pipeline in a surge scenario; and</li> <li>d) evaluate the controls such as valve closing times and pressure rating of pipes and related equipment.</li> </ul> <p>The findings of the Surge Study shall be included in the Final Hazard Analysis required under Condition C4d).</p>	No construction works took place during the reporting period.
C3.	<p>Prior to finalising the detailed design of the Development, the Applicant shall consult with SafeWork NSW regarding any requirements under the Work Health and Safety Act 2011 and Work Health and Safety Regulation 2011.</p>	No construction works took place during the reporting period.
C4	<p><b>Pre-construction</b></p> <p>At least one month prior to the commencement of construction of the Development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Secretary may agree, the Applicant shall prepare and submit for the approval of the Secretary the studies set out under subsections a) to d) (the pre-construction studies). Construction, other than of preliminary works, shall not commence until approval has been given by the Secretary and, with respect to the Fire Safety Study, approval has also been given by Fire and Rescue NSW (FRNSW).</p> <ul style="list-style-type: none"> <li>a) <b>CONSTRUCTION SAFETY STUDY</b> A Construction Safety Study prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 7, 'Construction Safety Study Guidelines'. For developments in which the construction period exceeds six (6) months, the commissioning portion of the Construction Safety Study may be submitted two months prior to the commencement of commissioning.</li> <li>b) <b>FIRE SAFETY STUDY</b> The Applicant's Fire safety Study (FSS) shall be updated to incorporate any changes due to the Development. This Fire Safety Study shall be prepared with consultation with the FRNSW. This study shall cover the relevant aspects of the Department's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'.</li> </ul>	Copy of site auditor correspondence previously provided.

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
	<p>Any outstanding issues from FRNSW shall be resolved and reported on in the FSS.</p> <p>c) HAZARD AND OPERABILITY STUDY                      A Hazard and Operability Study (HAZOP) for the Development chaired by an independent qualified person approved by the Secretary prior to the commencement of the study. In addition, the following shall be covered in the HAZOP:</p> <ul style="list-style-type: none"> <li>• surge issues for the various operating scenarios;</li> <li>• the ullage (in the tanks) above the high high alarm/emergency shutdown level, taking into account the slow closing time assigned to the emergency shutdown valves by the surge study required under Condition C2 above; and</li> <li>• the study shall be carried out in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 8, ‘HAZOP Guidelines’. The study report must be accompanied by a program for the implementation of all recommendations made in the study. Safety related recommendations must be included in the final design of the Development. If the Applicant intends to defer the implementation of a recommendation, justification must be included. NSW Government Department of Planning and Environment 5</li> </ul> <p>d) FINAL HAZARD ANALYSIS                      A Final Hazard Analysis of the overall Site, consistent with the Department’s Hazardous Industry Planning Advisory Paper No. 6, ‘Hazard Analysis’. The FHA shall report on the implementation of the recommendations of the PHA. The FHA shall:</p> <ul style="list-style-type: none"> <li>• demonstrate that the tank overfill protection system (for all tanks) reduces the risk so far as reasonably practicable, and it achieves as a minimum safety integrity level (SIL) 2 rating. A SIL allocation and verification report for the Development shall be undertaken and enclosed in the FHA;</li> <li>• re-evaluate and confirm all relevant data and assumptions from the PHA, in particular, the outcomes of the surge analysis that may result in changes in the risk assessment and impact on the overall risk from the facility;</li> <li>• re-evaluate and confirm all control measures proposed for prevention and mitigation of incidents; and</li> <li>• report on implementation of the recommendations of the PHA.</li> </ul>	

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C5.	<p><b>Pre-commissioning</b></p> <p>The Applicant shall develop and implement the plans and systems set out under subsections a) to c). No later than two months prior to the commencement of commissioning of the Development, or within such further period as the Secretary may agree, the Applicant shall submit, for the approval of the Secretary, documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Secretary.</p> <p>a) <b>TRANSPORT OF HAZARDOUS MATERIALS</b>            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 Site. The routes selected shall be consistent with the Department’s Hazardous Industry Planning Advisory Paper No. 11, ‘Route Selection’. Suitable routes identified in the study shall be used except where departures are necessary for local deliveries or emergencies.</p> <p>b) <b>EMERGENCY PLAN</b>            The Applicant’s Emergency Plan and detailed emergency procedures shall be updated to incorporate any changes due to the Development. The plan shall include detailed procedures for the safety of all people outside of the Site who may be at risk from the Site. The plan shall be in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 1, ‘Industry Emergency Planning Guidelines’.</p> <p>c) <b>SAFETY MANAGEMENT SYSTEM</b>            The Applicant’s Safety Management System shall be updated to include any changes due to the Development. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on Site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be developed in accordance with the Department’s Hazardous Industry Planning Advisory Paper No. 9, ‘Safety Management’.            An inspection, testing and preventive maintenance program should be developed, implemented and maintained to ensure the reliability and availability of the key safety critical equipment is, at a minimum, consistent with the data estimated in the PHA.</p>	<p>No soil imported during the reporting period.</p>
C6.	<p><b>Pre-startup Compliance Report</b></p> <p>One month prior to the commencement of operation of the Development, the Applicant shall submit to the Secretary, a report detailing compliance with Conditions C4 and C5, including: a) dates of study/plan/system submission, approval, commencement of construction and commissioning; b) actions taken or proposed, to implement the recommendations and safety-related control measures in the studies/plans/systems; c) a pre-startup safety review/checklist; and d) responses to each requirement imposed by the Secretary under Condition C9 of this Schedule.</p>	<p>Existing Groundwater Monitoring bores installed pursuant to the Water Management Act 2000.</p>

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C7.	<p><b>Post-startup Compliance Report</b></p> <p>Three months after the commencement of operation of the Development, the Applicant shall submit to the Secretary, a report verifying that:</p> <p>a) the Emergency Plan required under Condition C5b) is effectively in place and that at least one emergency exercise has been conducted; and NSW Government Department of Planning and Environment 6</p> <p>b) the Safety Management System required under Condition C5c) has been fully implemented and that records required by the system are being kept.</p>	All water discharged from the Site complied with the relevant EPL conditions (refer to <b>Section 7.3</b> of this Annual Review)
C8.	<p><b>Ongoing HAZARD AUDIT</b></p> <p>Twelve months after the commencement of operation of the Development and every three years thereafter, or at such intervals as the Secretary may agree, the Applicant shall carry out a comprehensive Hazard Audit of the Site and within one month of each audit submit a report to the Secretary.</p> <p>The audits shall be carried out at the Applicant's expense by a qualified person or team, independent of the Site, approved by the Secretary prior to commencement of each audit. Hazard Audits shall be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines' (HIPAP No. 5). The audit reports shall, in addition to the requirements provided in HIPAP No 5:</p> <p>a) verify implementation of all actions proposed by the Applicant in response to the recommendations from the Buncefield incident investigation report as contained in Appendix C of the PHA;</p> <p>b) verify that an inspection, testing and preventative maintenance program has been developed, implemented and maintained to ensure the reliability and availability of key safety critical equipment;</p> <p>c) confirm the throughput and storage quantities of potentially hazardous materials are consistent with the PHA; and</p> <p>d) verify implementation of any measures arising from the reports submitted in respect of Conditions C1 to C5 of this Schedule.</p> <p>The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented. This audit report must also be submitted to SafeWork NSW.</p>	Refer Aurecon Design Compliance Statement previously provided to DPIE.
C9.	<p><b>Further requirements</b></p> <p>The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Conditions C1 to C8, within such time as the Secretary may agree.</p>	No changes occurred to the stormwater management system previously approved by PON.

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C10.	<p>The Applicant shall contribute to, in so far as it relates to the Site, preparation of or updates to the following plans and audits for the Mayfield Concept Plan, in consultation with the PON:</p> <p>a) the Mayfield Site Precinct Emergency Management Plan, February 2016 consistent with the Department's Hazardous Industry Advisory Paper No. 1 – Emergency Planning;</p> <p>b) a Safety Management System, consistent with the Department's Hazardous Industry Advisory Paper No. 9 – Safety Management; and</p> <p>c) hazard audits, consistent with the Department's Hazardous Industry Advisory Paper No. 5 – Hazard Audit Guidelines.</p> <p>Notes:</p> <ul style="list-style-type: none"> <li>• The intent of the condition is to ensure any cumulative hazard issues across the Mayfield Concept Plan area are identified and managed; and</li> <li>• The relative contribution by the Applicant and timing shall be determined in consultation with the PON, to the satisfaction of the Secretary.</li> </ul>	Updated. See letter from DPIE
C11	<p><b>Air Quality Limits</b></p> <p>The Applicant shall install and operate equipment to ensure the Site complies with all load limits, air quality criteria and air quality monitoring requirements as specified in an EPL for the Site.</p>	Noted
C12	<p><b>Offensive Odour</b></p> <p>The Applicant shall not cause or permit the emission of offensive odours beyond the boundary of the Site, as defined under Section 129 of the POEO Act.</p>	Noted
C13	<p><b>Dust Minimisation</b></p> <p>The Applicant shall carry out all reasonable and feasible measures to minimise dust generated by the Site</p>	Noted
C14	<p>During construction and operation of the Development, the Applicant shall ensure:</p> <p>a) all vehicles on Site do not exceed the designated on Site speed limit;</p> <p>b) all loaded vehicles entering or leaving the Site have their loads covered; and</p> <p>c) all vehicles leaving the Site are cleaned of dirt, sand and other materials before they leave the Site, to avoid tracking these materials on to public roads.</p>	Noted
C15	<p><b>Vapour Recovery Unit</b></p> <p>The Applicant shall install and commission a vapour recovery unit on the six bay truck loading gantry prior to:</p> <p>a) annual throughput of petroleum products exceeding 1,300 ML; or</p> <p>b) bulk storage of any Class 3 Flammable Liquid Dangerous Goods, described in the EIS.</p>	No flammable products or products in excess of 1,300ML have been through the site during the reporting period therefore the need for Vapour Recovery Unit (VRU) has not yet been triggers.
C16	<p>The vapour recovery unit shall be designed, constructed and operated in accordance with the requirements of the EPL.</p>	Noted

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C17	The Applicant shall monitor emissions from the vapour recovery unit stack in accordance with the requirements of the EPL. The monitoring data shall be reported to the PON on a quarterly basis, or in accordance with the monitoring frequency required in the EPL	Noted. The VRU is not yet required and therefore hasn't been installed.
C18	If the results of monitoring show any impact greater than that predicted by the air quality modelling in the EIS, the Applicant shall investigate and implement further air quality mitigation measures as directed by the Secretary or the EPA.	Noted.
C19	<b>Air Quality Management Plan</b> The Applicant shall update the existing Air Quality Management Plan for the Site to include the Development, to the satisfaction of the Secretary. This plan shall: a) be approved by the Secretary prior to operation of the Development; b) describe the measures that would be implemented to ensure compliance with the relevant conditions of this consent and the EPL; c) describe the air quality monitoring to measure the performance of the Development against the conditions of this consent and the EPL; and d) demonstrate the air quality measures for the Development are consistent with the PON's Mayfield Air Quality Monitoring Plan, October 2015, or its latest version	Plan has been previously updated
C20	<b>Greenhouse Gas</b>  The Applicant shall implement all reasonable and feasible measures to minimise energy use on Site and greenhouse gas emissions produced on Site.	Noted
C21	<b>Meteorological Monitoring</b>  The Applicant shall install, operate and maintain a meteorological weather station on the Site that complies with the requirements of an EPL for the Site.	
C22	<b>Traffic Movements</b>  The Applicant shall: a) keep accurate records of truck movements including: • total hourly truck movements in peak periods; • total truck movements per day; • total truck movements per annum; • the volume of flammable and combustible liquids received, stored and dispatched; b) report these records in the Annual Review; and c) provide these records to PON on a bi-monthly basis.	Records are maintained and reported in accordance with this condition (Refer to <b>Section 9.2, 9.2.1</b> and <b>Appendix D</b> of this Annual Review)
C23	The Applicant shall ensure:  a) all internal roads and parking (including driveways, grades, lighting, aisle widths, aisle lengths, turning paths, sight distance requirements and parking bay dimensions) associated with the Development are designed and constructed in accordance with the latest versions of the Australian Standards 2890.1:2004 and 2890.2:2002;	Noted

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
	<p>b) internal roads accessed by heavy vehicles are designed to ensure the swept paths of the longest vehicle and maneuverability through the site is in accordance with AUSTRROADS – Guide to Road Design; and NSW Government Department of Planning and Environment 8</p> <p>c) car, motorbike and bicycle parking spaces are provided on site in accordance with the requirements of the Newcastle Development Control Plan, 2012, where relevant.</p>	
C24	<p>The Applicant shall ensure:</p> <p>a) all heavy vehicle movements to and from the Site are made in a forward direction; and</p> <p>b) vehicles associated with the Site do not park or queue on the public road network outside the Mayfield Concept Plan area.</p>	Noted
C25	<p>The Applicant shall update the existing operational Traffic Management Plan for the Site to include the Development. The plan shall:</p> <p>a) be approved by RMS and the Secretary prior to operation of the Development;</p> <p>b) be prepared in consultation with PON, PNSW, Council, RMS, adjoining land owners and the local community;</p> <p>c) detail vehicle routes, access arrangements and coordination with other developments in the Mayfield Concept Plan area;</p> <p>d) include details of driver training awareness to minimise noise, in particular from reversing alarms and compression braking;</p> <p>e) detail procedures for assessing the effectiveness of measures to minimise heavy vehicles accessing residential streets;</p> <p>f) detail procedures for managing operational traffic, including adherence to the Australian Code for Transport of Dangerous Goods by Road and Rail, January 1998 or its latest version; and</p> <p>g) be updated to be consistent with the PON's Traffic Management Plan, Mayfield Concept Plan, November 2015 or its latest version.</p>	Updated. See letter from DPIE
C26	<p>The Applicant shall comply with the hours of work in Table 1:</p> <p><b>Construction:</b> Monday to Friday - 7 am – 6 pm Saturday 8 am – 1 pm Sunday &amp; Public Holidays – nil</p> <p><b>Operation</b> Monday – Sunday – 24 hours</p>	Noted



Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C27	The Applicant shall implement all reasonable and feasible management and mitigation measures to ensure noise generated during construction of the Development does not exceed the construction noise goals in Table 2 of the consent conditions.	Noted
C28	Construction outside of the hours identified in Condition C26 may be undertaken in the following circumstances: a) works that are inaudible at the nearest sensitive receivers; b) works agreed to in writing by the Secretary; c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or d) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm	Noted
C29	<b>Mayfield Concept Plan Site Noise Model</b>  Prior to the commencement of construction of the Development, the Applicant shall provide the Noise and Vibration Impact Assessment, prepared by AECOM dated 19 February 2016, including all modelling data, to the PON for the purposes of updating the Site Noise Model	Previously provided to PON
C30	The Applicant shall ensure noise from the Site does not exceed the noise limits in Table 3	Noise limits comply with this consent condition (Refer to <b>Section 8.0</b> of this Annual Review)
C31	The Applicant shall ensure fire pumps on the Site are designed and operated so that noise from routine testing or maintenance is not more than $L_{eq(15min)}$ 53 dB(A) at sensitive receivers. Routine testing or maintenance must only occur during the day time	Noise limits comply with this consent condition (Refer to <b>Section 8.0</b> of this Annual Review)
C32	The Applicant shall:  a) ensure noise from the Site does not exceed the noise quotas provided by the PON in accordance with the Site Noise Model; and  b) comply with the directions of the PON in relation to the management of noise from the Site.	Noise limits comply with this consent condition (Refer to <b>Section 8.0</b> of this Annual Review)
C33	The Applicant shall: a) implement all reasonable and feasible noise management and mitigation measures to prevent and minimise noise from the Site; b) implement, where possible, a safe system of work so that tonal movement alarms, such as reversing beepers, are not needed on the Site; c) maintain the effectiveness of any noise suppression equipment or plant at all times and ensure defective plant that may generate offensive noise is not used operationally until fully repaired; and d) regularly assess noise monitoring data and relocate, modify and/or stop operations to ensure compliance with the relevant conditions of this consent	Noted

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C34	<p><b>Noise Management Plan</b></p> <p>The Applicant shall update the existing Noise Management Plan for the Site to include the Development. The plan shall:</p> <ul style="list-style-type: none"> <li>a) be prepared by a suitably qualified expert, in accordance with EPA Guidelines;</li> <li>b) be approved by the Secretary prior to operation of the Development;</li> <li>c) describe the measures that would be implemented to ensure compliance with the: i. noise limits in Condition C30; and ii. noise quotas provided by PON, to maintain compliance with the noise goals in the Mayfield Concept Plan;</li> <li>d) include a procedure for implementing noise mitigation measures, should the Applicant be directed to by the EPA, PON or the Secretary, or should non-compliances be detected; and</li> <li>e) include procedures to receive, record and respond to complaints.</li> </ul>	Previously updated
C35	<p>The Applicant shall monitor noise from the Site. The monitoring shall:</p> <ul style="list-style-type: none"> <li>a) be undertaken annually, or to address genuine noise complaints related to the Site as determined by the Secretary, EPA or the PON;</li> <li>b) be undertaken in accordance with the NSW Industrial Noise Policy and the Noise Verification Monitoring Plan, October 2015 or its latest version;</li> <li>c) demonstrate compliance with the noise limits in this consent and the noise quotas provided by PON in accordance with the Mayfield Concept Plan; and</li> <li>d) be reported annually to the Secretary, EPA and the PON.</li> </ul> <p>Note: The monitoring requirements could be satisfied by the monitoring network required for the Mayfield Concept Plan once established.</p>	Noise monitoring reports prepared and included in <b>Section 8.0</b> of this Annual Review
C36	<p><b>Statutory Requirements</b></p> <p>The Applicant shall carry out the Development in accordance with the requirements of the:</p> <ul style="list-style-type: none"> <li>a) Remediation Notice; and</li> <li>b) CSMP</li> </ul>	Copy of site auditor correspondence previously provided.
C37	Prior to commencement of construction, the Applicant shall provide written evidence to the Secretary from the Site Auditor confirming that all construction works associated with the Development meet the requirements of the documents listed in Condition C36 above	Copy of site auditor correspondence previously provided.
C38	Prior to commencement of operation, the Applicant shall provide written evidence to the Secretary from the Site Auditor confirming that all works associated with the Development have been constructed in accordance with the requirements of the documents listed in Condition C36 above.	Copy of site auditor correspondence previously provided.
C39	<p><b>Human Health Risk</b></p> <p>The Applicant shall provide written advice from the Site Auditor confirming that all works associated with the Development would be constructed to address any risk of harm to human health posed by the potential ingress of volatile vapours into buildings and confined spaces</p>	Copy of site auditor correspondence previously provided.

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
C40	<p><b>Imported Soil</b>                      The Applicant shall:                      a) ensure that only VENM or ENM or other material approved in writing by the EPA or the Site Auditor is used as fill on the Site;                      b) keep accurate records of the volume and type of fill to be used on Site; and                      c) make these records available to PON and the Secretary upon request.</p>	No soil imported to site during this reporting period
C41	<p><b>Water licences</b>                      The Applicant is required to obtain the necessary water licences for the Development under the Water Act 1912 and/or the Water Management Act 2000. Note: Licences are required for groundwater bores, excavations that may intercept groundwater, dewatering activities and extraction or interception of surface water.</p>	Groundwater monitoring bores installed pursuant to the <i>Water Management Act 2000</i>
C42	<p><b>Discharge Limits</b>                      The Applicant shall ensure all water discharges from the Site comply with the requirements specified in an EPL for the Site</p>	All water discharged from the Site complied with the relevant EPL conditions (refer to <b>Section 7.3</b> of this Annual Review)
C43	<p><b>Stormwater and Drainage System</b>                      The Applicant shall maintain the stormwater and drainage system for the Site to the satisfaction of PON</p>	No changes occurred to the stormwater management system previously approved by PON.
C44	<p><b>Stormwater and Drainage Management Plan</b>                      The Applicant shall update the existing Stormwater and Drainage Management Plan for the Site to include the Development, to the satisfaction of the Secretary. The plan shall:                      a) be updated prior to operation of the Development; b) be prepared in accordance with OEH's Managing Urban Stormwater and other relevant guidelines;                      c) detail the stormwater infrastructure to be installed for the Development and detail how it integrates with the existing stormwater system on the Site;                      d) describe the measures to be implemented to maintain this infrastructure over time;                      e) include a program to monitor stormwater quality and quantity; and                      f) detail how the stormwater infrastructure integrates and is consistent with the PON's Concept Stormwater Management Strategy dated 9 July 2015 or its latest version.</p>	This plan was reviewed and updated to be consistent with SSD_7065 during the 2018 reporting period. DPIE subsequently approved the updated plan.
C45	<p><b>Water Management Plan</b>                      The Applicant shall update the existing Water Management Plan for the Site to include the Development, to the satisfaction of the Secretary. The plan shall:                      a) be updated prior to operation of the Development; b) include procedures for the prevention and management of spills and leaks from the Development, including the terminal, M7 berth and pipeline;                      c) include a surface water monitoring program to measure the quality and quantity of water discharges from the Site in accordance with an EPL for the Site; d) include a groundwater monitoring program to evaluate the integrity of the surface capping in minimising groundwater contamination and monitor in accordance with the requirements of an EPL for the Site; and</p>	This plan was reviewed and updated to be consistent with SSD_7065 during the 2018 reporting period. DPIE subsequently approved the updated plan.

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
	e) include a surface and groundwater response plan, including remedial actions and procedures to be followed in the event of an incident.	
C46	<b>Bundling and Storage of Liquids</b> The Applicant shall store all chemicals, fuels and oils used on the Site in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or the EPA's Storing and Handling of Liquids: Environmental Protection – Participants Handbook.	Noted
C47	The Applicant shall ensure all bunds: a) have impervious walls and floors; b) are of sufficient capacity to contain 110% of the volume of the tank (or 110% of the volume of the largest tank where a group of tanks are installed); c) have floors graded to a collection sump; and d) do not have a drain valve incorporated in the bund structure, or are constructed and operated in a manner that achieves the same environmental outcome.	Refer Aurecon Design Compliance Statement previously provided to DPIE
C48	<b>Leak Prevention</b> The Applicant shall: a) conduct annual integrity testing on the petroleum product pipeline extending between the terminal and the M7 berth; b) conduct leak testing of the petroleum products pipeline extending between the terminal and the M7 berth prior to each transfer of product; c) conduct surveillance checks on the pipeline prior to the commencement of and during transfer operations of any petroleum products; and d) maintain a register for all integrity and pressure tests conducted on the pipeline extending between the terminal and the M7 berth	Annual pipeline integrity testing undertaken (Refer <b>Section 13.3</b> and <b>Appendix G</b> of this Annual Review
C49	<b>UTILITIES AND SERVICES</b> The Applicant shall update the existing Utilities and Services Plan for the Site to include the Development. The plan must: a) be updated prior to operation of the Development; b) be prepared in consultation with relevant utility and service providers and adjacent landowners, where relevant; c) include an implementation schedule which shows how all essential utilities and services are to be provided to the Site; d) provide a copy of all necessary consents from relevant utility and service providers showing that access to these utilities and services is available and secured; and e) include a strategy to integrate all utilities and services with the broader system to be provided by PON for the Mayfield Concept Plan, and be consistent with the Utilities Infrastructure Plan, July 2015, or its latest version.	This plan was reviewed and updated to be consistent with SSD_7065 during the reporting period. DPIE subsequently approved the updated plan
C50	<b>Landscaping</b> The Applicant shall update the existing Landscape Management Plan for the Site to include the Development, to the satisfaction of the Secretary. The Plan must: a) be prepared in consultation with PON and in accordance with the relevant requirements of the Newcastle Development Control Plan, 2012; b) be updated and implemented prior to operation of the Development;	Plan has been previously updated

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
	<p>c) demonstrate the building treatments are of sufficient design quality to minimise the visual impacts of the Site, and include a variety of materials and external finishes;</p> <p>d) illustrate the location, species and mature heights of plants to be established on Site;</p> <p>e) provide for the maintenance of the landscaping on Site; and</p> <p>f) ensure the administration building and landscaping is consistent with the requirements of the PON acknowledging the Site's location at the entrance to the Mayfield Concept Plan area.</p>	
C51	<p><b>Building Materials</b> Where possible the Applicant shall utilise building materials that minimise the potential visibility of the Development, including non-reflective materials</p>	Noted
C52	<p><b>Lighting</b> The Applicant shall ensure any lighting associated with the Site:</p> <p>a) complies with the latest version of Australian Standard AS 4282 (INT)-Control of Obtrusive Effects of Outdoor Lighting, where relevant; and</p> <p>b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.</p>	Complete
C53	<p><b>Signage</b> The petroleum product pipeline extending between the terminal and the M7 berth must:</p> <p>a) be identified in accordance with Australian Standard AS1345-2008: Identification of the contents of pipes, conduits and ducts; and</p> <p>b) include pipe markers including the name of the Applicant and emergency contact details.</p>	Noted
C54	The Applicant shall not install any advertising signs on the Site without consultation with the PON and the written consent of the Secretary.	Noted
C55	<p><b>Site Security</b> The Applicant shall:</p> <p>a) install and maintain a perimeter fence and security gates on the Site;</p> <p>b) ensure the security gates on Site are locked whenever the Site is unattended; and</p> <p>c) consult with the PON with regards to minimum fencing specifications.</p>	Noted
C56	<p><b>WASTE</b> The Applicant shall ensure any waste generated on the Site is classified in accordance with the EPA's Waste Classification Guidelines (DECCW, 2009), or any superseding document and disposed of to a facility that may lawfully accept the waste.</p>	Noted
C57	Waste generated outside the Site shall not be received at the Site for storage, treatment, processing, reprocessing, or disposal on the Site, except as expressly permitted by an EPL, if such a licence is required in relation to that waste	Noted
C58	<p>The Applicant shall:</p> <p>a) implement all reasonable and feasible measures to minimise waste generated on Site; and</p> <p>b) ensure any waste generated on Site is appropriately stored, handled and disposed of.</p>	Noted

Schedule C – Specific Environmental Conditions Conditions – Compliance Requirements

No	Description	Statement of Compliance
F59	<p><b>AVIATION SAFETY</b></p> <p>Prior to the commencement of construction, the Applicant shall provide the Secretary with a copy of all necessary approvals from the Air Base Command Post of RAAF Base Williamstown and the Directorate of External Land Planning within the Defence Support Group of the Department of Defence for the erection of all structures that constitute transient/temporary or permanent obstructions in accordance with the Operation of cranes and tall structures in the vicinity of Newcastle Airport (Department of Defence, 2013).</p>	Complete

Schedule D – Environmental Management Reporting – Compliance Requirements

No	Description	Statement of Compliance
D1	<p><b>Construction Environmental Management Plan</b></p> <p>The Applicant shall prepare a Construction Environmental Management Plan (CEMP) for the Development, to the satisfaction of the Secretary. The Plan must:</p> <ul style="list-style-type: none"> <li>a) be approved by the Secretary prior to construction of the Development;</li> <li>b) identify the statutory approvals that apply to the Site;</li> <li>c) outline all environmental management practices and procedures to be followed during construction;</li> <li>d) describe all activities to be undertaken on the Site during construction, including a clear indication of construction stages;</li> <li>e) detail how the environmental performance of the construction works will be monitored, and what actions will be taken to address identified adverse environmental impacts;</li> <li>f) describe the roles and responsibilities for all relevant employees involved in construction works; and</li> <li>g) include the management plans under Condition D2 of this consent.</li> </ul>	Noted
D2	<p>As part of the CEMP for the Development, required under Condition D1 of this consent, the Applicant shall include the following:</p> <ul style="list-style-type: none"> <li>a) a soil and water management plan;</li> <li>b) a contaminated materials management plan, prepared in consultation with the PON;</li> <li>c) a traffic management plan;</li> <li>d) a noise and vibration management plan;</li> <li>e) an air quality (dust) management plan;</li> <li>f) a utilities and services provision plan; and</li> <li>g) a waste management plan.</li> </ul>	Noted
D3	<p>The Applicant shall carry out construction of the Development in accordance with the CEMP approved by the Secretary (and as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary.</p>	Noted
D4	<p><b>Environmental Management Strategy</b></p> <p>The Applicant shall update the existing Environmental Management Strategy (EMS) for the Site to include the Development, to the satisfaction of the Secretary. The EMS shall:</p> <ul style="list-style-type: none"> <li>a) be submitted to the Secretary for approval prior to operation of the Development;</li> </ul>	Previously updated



Schedule D – Environmental Management Reporting – Compliance Requirements

No	Description	Statement of Compliance
	<p>b) be prepared by a suitably qualified and experienced expert;</p> <p>c) provide the strategic framework for environmental management of the Site;</p> <p>d) identify the statutory requirements that apply to the Site;</p> <p>e) describe the role, responsibility, authority and accountability of all key personnel involved in the environmental management of the Site;</p> <p>f) describe in general how the environmental performance of the Site would be monitored and managed;</p> <p>g) describe the procedures that would be implemented to:</p> <ul style="list-style-type: none"> <li>• keep the local community and relevant agencies informed about the operation and environmental performance of the Site;</li> <li>• receive, handle, respond to, and record complaints;</li> <li>• resolve any disputes that may arise in relation to operations at the Site;</li> <li>• respond to any non-compliance;</li> <li>• manage cumulative impacts;</li> <li>• respond to emergencies;</li> </ul> <p>h) include the management plans under Condition D5 of this consent; and</p> <p>i) be provided to the PON once approved by the Secretary, including any approved amendments to the EMS.</p>	
D5	<p>As part of the EMS for the Site, required under Condition D4 of this consent, the Applicant shall include the following: a) air quality; b) traffic; c) noise; d) stormwater and drainage; e) water; f) utilities and services; and g) landscape.</p>	Noted
D6	<p>The Applicant shall operate the Site in accordance with the EMS approved by the Secretary (and as revised and approved by the Secretary from time to time), unless otherwise agreed by the Secretary</p>	Noted
D7	<p><b>Management Plan Requirements</b></p> <p>The Applicant shall ensure the management plans required under this consent are prepared in accordance with any relevant guidelines, and include: a) detailed baseline data; b) a description of:</p> <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant consent, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria; and</li> <li>• the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the Site or any management measures;</li> </ul> <p>c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;</p> <p>d) a program to monitor and report on the:</p> <ul style="list-style-type: none"> <li>• impacts and environmental performance of the Site; and</li> <li>• effectiveness of any management measures (see c) above);</li> </ul> <p>e) a contingency plan to manage any unpredicted impacts and their consequences;</p> <p>f) a program to investigate and implement ways to improve the environmental performance of the Site over time;</p> <p>g) a protocol for managing and reporting any:</p> <ul style="list-style-type: none"> <li>• incidents;</li> <li>• complaints;</li> <li>• non-compliances with statutory requirements; and</li> <li>• exceedances of the relevant limits and/or performance measures / criteria; and</li> </ul> <p>h) a protocol for periodic review of the plan.</p>	Previously complete

Schedule D – Environmental Management Reporting – Compliance Requirements

No	Description	Statement of Compliance
D8	<p><b>Revisions to Strategies, Plans and Programs</b>                      Within three months of the submission of an:</p> <ul style="list-style-type: none"> <li>a) audit submitted under Condition D12;</li> <li>b) incident report under Conditions D10 and D11;</li> <li>c) annual review under Condition D9; and/or</li> <li>d) a modification to this consent, the Applicant shall review, and if necessary, revise the strategies, plans, and programs required under this consent to the satisfaction of the Secretary.</li> </ul>	Noted
D9	<p><b>Annual Review</b>                      By the end of December each year, and annually thereafter, the Applicant shall review the environmental performance of the Site, to the satisfaction of the Secretary. This review must:</p> <ul style="list-style-type: none"> <li>a) be prepared in consultation with PON;</li> <li>b) describe the operations that were carried out in the past year;</li> <li>c) analyse the monitoring results and complaints records of the Site over the past year, including a comparison of these results against the:                             <ul style="list-style-type: none"> <li>• relevant statutory requirements, limits or performance measures/criteria;</li> <li>• monitoring results of previous years; and</li> <li>• predictions in the EIS;</li> </ul> </li> <li>d) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</li> <li>e) identify any trends in the monitoring data;</li> <li>f) identify any discrepancies between the impacts predicted in the EIS and the actual impacts of the Site and analyse the potential cause of any significant discrepancies; and</li> <li>g) describe what measure will be implemented over the next year to improve the environmental performance of the Site.</li> </ul>	This Annual Review is prepared in accordance with this condition.
D10	<p><b>Incident Reporting</b>                      Upon detecting an exceedance of the limits/performance criteria in this consent or the occurrence of an incident that causes (or may cause) material harm to the environment, the Applicant shall immediately (or as soon as practical thereafter) notify the Secretary, PON and any other relevant agencies of the exceedance/incident.</p>	Noted
D11	<p>Within seven days of the date of the incident, the Applicant shall provide the Secretary, PON and any relevant agencies with a detailed report on the incident, and such further reports as may be requested</p>	Noted
D12	<p><b>INDEPENDENT ENVIRONMENTAL AUDIT</b>                      Within one year of the date of this consent, and every three years thereafter, unless the Secretary directs otherwise, the Applicant shall commission and pay the full cost of an Independent Environmental Audit of the Site. The audit must:</p> <ul style="list-style-type: none"> <li>a) be carried out by a suitably qualified, experienced and independent audit team whose appointment has been endorsed by the Secretary;</li> <li>b) include consultation with PON;</li> <li>c) assess the environmental performance of the Site, and its effects on the surrounding environment;</li> <li>d) determine whether the Site is complying with the relevant standards, performance measures and statutory requirements, including the Mayfield Concept Plan;</li> </ul>	NA Independent Environmental Audit was undertaken during the reporting period. A copy of the IEA was has been previously provided to DPIE compliance.



Schedule D – Environmental Management Reporting – Compliance Requirements		
No	Description	Statement of Compliance
	<p>e) review the adequacy of the EMS for the Site, compliance with this consent, and any other licences and consents; and, if necessary;</p> <p>f) recommend measures or actions to improve the environmental performance of the Site, and/or any plan/program required under this consent.</p>	
D13	<p>Within three months of commissioning the audit, or as otherwise agreed by the Secretary, the Applicant shall submit a copy of the audit report to the Secretary, EPA and PON with a response to all recommendations contained in the audit report</p>	Noted
D14	<p><b>COMMUNITY CONSULTATION</b> The Applicant shall contribute to the Community Communication Strategy required for the Mayfield Concept Plan. The level and timing of the contribution by the Applicant shall be determined in consultation with the PON</p>	Community consultation has been undertaken as described in <b>Section 12.0</b> of this Annual Review
D15	<p><b>ACCESS TO INFORMATION</b> The Applicant shall make the following information publicly available on its website and keep the information up to date:</p> <p>a) the EIS;</p> <p>b) current statutory consents for the Site;</p> <p>c) approved strategies, plans and programs;</p> <p>d) a summary of all monitoring data for the Site as required under this consent and the Mayfield Concept Plan;</p> <p>e) a complaints register, updated on an annual basis; f) Annual Reviews, Independent Environmental Audits and the Applicant's response to the recommendations; and</p> <p>g) any other matter required by the Secretary.</p> <p>Note: This condition does not require any confidential information to be made available to the public.</p>	<p>This information is available on Stolthaven's website:</p> <p><a href="https://www.stolt-nielsen.com/en/our-businesses/stolthaven-terminals/terminal-network/stolthaven-newcastle">https://www.stolt-nielsen.com/en/our-businesses/stolthaven-terminals/terminal-network/stolthaven-newcastle</a></p>

# **Appendix G**

## **Pipeline Integrity Test Report**

**Hancock & Owen Services Pty Ltd**

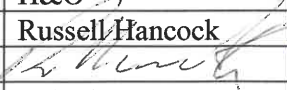
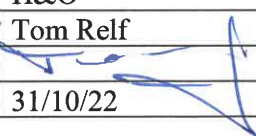
<b>PIPELINE PRESSURE TEST CERTIFICATE</b>	
<b>Customer Site:</b> Stolthaven	<b>Certificate No.</b> HO 251022

<b>Project Name:</b> Wharfline	<b>System:</b> Diesel
<b>Flow Medium:</b> Diesel	<b>Location:</b> Newcastle
<b>Site Drawing No. (s) :</b> N/A	

<b>Piping Code:</b> ASME B31.3	<b>Design Temp.:</b> 0-40 deg C
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<b>Test Medium:</b> Diesel	<b>Test Pressure:</b> 1500 kPa		
<b>Test Duration:</b> 1 hour	<b>Start</b>	11.00am	<b>Finish</b> 12.00pm
<b>Test Date:</b> 25/10/22	<b>Testing Officer:</b> Russell Hancock		
<b>ISO No.</b>	<b>LINE No.</b>		
	Wharfline		

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	<b>Completed By</b>	<b>Approved By</b>	<b>Accepted By</b>
<b>Company</b>	H&O	H&O	
<b>Name</b>	Russell Hancock	Tom Relf	
<b>Signature</b>			
<b>Date</b>	26/10/22	31/10/22	

# **Appendix H**

**2022 Waste Management**

<b>Effluent</b>			
<b>Date</b>	<b>Terminal Quantity</b>	<b>Mayfield 7 Quantity</b>	<b>Company</b>
5/01/22	2,500	500	Cleanaway
13/01/22	2,000	TBC	Cleanaway
22/01/22	2,400	600	Cleanaway
27/01/22	2,500	1,500	Cleanaway
3/02/22	1,500	600	Cleanaway
12/02/22	2,000	1,000	Cleanaway
17/02/22	2,200	600	Cleanaway
24/02/22	3,000	1,000	Cleanaway
3/03/22	2,000	500	Cleanaway
10/03/22	2,200	0	Cleanaway
11/03/22	1,300	1,000	Cleanaway
17/03/22	2,500	500	Cleanaway
24/03/22	3,000	1,000	Cleanaway
31/03/22	3,000	1,000	Cleanaway
7/04/22	2,000	500	Cleanaway
14/04/22	2,000	500	Cleanaway
21/04/22	2,000	500	Cleanaway
28/04/22	2,000	500	Veolia
5/05/22	3,000	1,000	Veolia
11/05/22	2,000	500	Veolia
19/05/22	2,000	1,000	Veolia
26/05/22	2,500	1,000	Veolia
2/06/22	2,500	500	Veolia
10/06/22	2,500	1,000	Veolia
15/06/22	2,000	500	Veolia
22/06/22	2,500	500	Veolia
29/06/22	3,000	500	Veolia
8/07/22	3,500	1,500	Veolia
14/07/22	3,500	1,500	Veolia
20/07/22	2,000	500	Veolia
27/07/22	2,000	500	Veolia
4/08/22	3,000	1,500	Veolia
12/08/22	2,500	1,500	Veolia
18/08/22	2,500	Nil	Veolia
25/08/22	3,000	500	Veolia
1/09/22	3,000	1,000	Veolia
8/09/22	2,500	500	Veolia
16/09/22	3,000	1,000	Veolia

<b>Hazardous Waste (Liquid)</b>			
<b>Date</b>	<b>Quantity</b>	<b>Transfers</b>	<b>Company</b>
25/01/22	0	13,380	JLP Transfer
17/02/22	0	14,153	JLP Transfer
31/03/22	0	23,341	JLP Transfer
22/04/22	18,000	0	Veolia
27/04/22	0	10,620	JLP Transfer
23/05/22	0	19,250	JLP Transfer
10/06/22	0	23,891	JLP Transfer
1/07/22	0	19,700	JLP Transfer
25/07/22	0	22,440	JLP Transfer
9/08/22	0	23,450	JLP Transfer
24/08/22	0	8,960	JLP Transfer
25/08/22	4,820	0	Veolia
19/09/22	0	22,440	JLP Transfer
28/09/22	0	10,000	JLP Transfer
12/10/22	0	21,700	JLP Transfer
1/11/22	0	22,240	JLP Transfer
22/11/22	0	16,000	JLP Transfer
14/12/22	0	17,000	JLP Transfer
28/12/22	0	13,500	JLP Transfer

### Bund Water Results 2022

	Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (uS/cm)	Appearance	Volume (L) Approx.	Comments
2022 155	1/06/2022	1/06/2022	Bund 1	28.2	8.25	57.5	31.3	71.0	clear	5,000	
			Bund 2	28.0	7.92	57.1	36.2	68.7	clear	5,000	
			Bund 3	27.9	8.1	55.5	42.0	66.2	clear	5,000	
			Bund 5	27.4	8.3	50.1	38.4	78.3	clear	10,000	
			Bund 6	27.5	8.25	58.0	50.5	72.4	clear	5,000	
			Bund 7	28.3	7.62	56.1	51.8	71.9	clear	3,000	
			Bund 8	27.6	8.35	59.6	61.9	72.8	clear	5,000	
			Bund 9	27.8	8.12	60.3	63.7	70.0	clear	5,000	
			156	1/10/2022	1/10/2022	Bund 1	22.2	7.48	61.3	76.3	45.2
Bund 2	22.8	7.62				57.2	81.7	50.1	clear	5,000	
Bund 3	22.6	7.09				51.9	80.4	49.7	clear	5,000	
Bund 5	22.6	7.17				63.7	84.3	38.2	clear	10,000	
Bund 6	22.2	7.89				50.4	70.6	30.9	clear	5,000	
Bund 7	22.9	7.67				66.7	75.2	35.6	clear	3,000	
Bund 8	22.8	7.21				60.3	80.7	32.3	clear	5,000	
Bund 9	22.5	7.90				59.8	79.6	33.7	clear	5,000	
157	19.01.2022	19.01.2022				Bund 1	23.6	7.17	50.8	76.4	49.6
			Bund 2	23.9	7.82	52.7	70.2	50.1	clear	5,000	
			Bund 3	23.1	7.51	50.3	64.3	48.7	clear	5,000	
			Bund 5	24.0	7.91	57.6	71.8	55.2	clear	10,000	
			Bund 6	23.1	7.08	60.4	75.2	51.7	clear	5,000	
			Bund 7	23.5	8.03	55.2	69.7	56.3	clear	3,000	
			Bund 8	23.5	7.13	61.3	76.1	41.8	clear	5,000	
			Bund 9	23.7	7.24	62.1	74.1	44.3	clear	5,000	
			158	2/03/2022	2/03/2022	Bund 1	24.2	7.09	51.7	76.3	48.6
Bund 2	24.6	7.17				49.6	71.1	50.1	clear	5,000	
Bund 3	23.9	7.96				56.3	70.4	47.3	clear	5,000	
Bund 5	24.4	7.34				57.2	89.3	49.3	clear	10,000	
Bund 6	24.2	7.8				55.4	80.2	52.1	clear	5,000	
Bund 7	24.1	7.13				55.7	78.9	50.7	clear	3,000	
Bund 8	24.8	7.02				52.3	83.4	46.3	clear	5,000	
Bund 9	24.2	7.89				50.4	77.8	40.2	clear	5,000	
159	14.02.2022	14.02.2022				Bund 1	26.7	7.16	62.3	76.2	48.6
			Bund 2	26.1	7.45	59.7	81.3	50.1	clear	15,000	
			Bund 3	26.8	6.93	61.2	79.8	45.7	clear	15,000	
			Bund 5	26.3	7.02	58.6	80.2	45.4	clear	20,000	
			Bund 6	26.3	7.81	63.7	75.3	49.6	clear	20,000	
			Bund 7	26.0	7.9	60.4	79.1	51.2	clear	10,000	
			Bund 8	26.2	7.60	66.2	76.4	41.2	clear	15,000	
			Bund 9	26.5	7.64	64.3	82.7	43.3	clear	15,000	
			160	3/01/2022	3/01/2022	Bund 1	26.7	6.86	58.6	87.4	50.6
Bund 2	26.5	7.01				60.4	74.6	47.2	clear	5,000	East Coast Low from 03 Mar
Bund 3	26.7	6.91				59.6	54.1	49.3	clear	5,000	East Coast Low from 03 Mar
Bund 5	26.8	7.23				62.8	58.1	43.1	clear	10,000	East Coast Low from 03 Mar
Bund 6	26.1	6.94				61.9	70.4	51.6	clear	10,000	East Coast Low from 03 Mar
Bund 7	26.5	7.18				52.2	68.2	44.7	clear	10,000	East Coast Low from 03 Mar
Bund 8	26.5	7.42				60.7	71.3	52.9	clear	10,000	East Coast Low from 03 Mar
Bund 9	26.4	7.01				61.2	62.6	52.1	clear	10,000	East Coast Low from 03 Mar
161	3/07/2022	3/07/2022				Bund 1	28.3	8.33	19.8	63.2	30.5
			Bund 2	28.2	8.16	12.2	57.2	19.8	clear	15000	
			Bund 3	28.0	7.76	18.7	61.5	29.1	clear	15000	

	Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (uS/cm)	Appearance	Volume (L) Approx.	Comments
			Bund 5	28.0	7.64	15.1	54.4	23.0	clear	20000	
			Bund 6	28.1	7.16	17.1	49.9	26.5	clear	20000	
			Bund 7	27.9	7.04	22.3	45.2	34.3	clear	20000	
			Bund 8	27.8	6.98	24.6	43.5	38.1	clear	20000	
			Bund 9	27.8	6.82	25.9	45.9	39.5	clear	20000	
162	25.03.2022	25.03.2022	Bund 1	22.4	7.12	21.4	49.7	28.6	clear	15,000	
			Bund 2	22.9	7.64	20.1	56.9	34.2	clear	10,000	
			Bund 3	22.2	7.09	18.6	51.2	29.7	clear	10,000	
			Bund 5	22.9	7.98	21.7	55.4	39.8	clear	20,000	
			Bund 6	23.1	7.86	15.8	50.6	33.4	clear	20,000	
			Bund 7	22.8	8.03	17.2	47.2	47.8	clear	10,000	
			Bund 8	23.1	7.22	20.6	49.4	32.6	clear	10,000	
			Bund 9	22.9	7.57	19.4	42.3	45.3	clear	10,000	
163	30.03.2022	30.03.2022	Bund 1	24.9	8.23	19.9	60.4	28.1	clear	10,000	
			Bund 2	24.7	8.15	20.1	56.8	29.9	clear	5,000	
			Bund 3	24.6	7.70	20.6	53.5	30.7	clear	5,000	
			Bund 5	25.0	7.59	22.8	42.7	35.1	clear	20,000	
			Bund 6	25.2	7.51	25.4	44.3	37.7	clear	20,000	
			Bund 7	24.5	7.10	23.2	42.5	46.8	clear	5,000	
			Bund 8	24.0	7.20	24.9	41.1	31.6	clear	5,000	
			Bund 9	24.2	6.97	25.8	43.2	35.5	clear	5,000	
164	4/08/2022	4/08/2022	Bund 1	23.8	7.42	39.5	49.5	61.1	clear	10,000	
			Bund 2	23.6	7.25	40.0	48.3	61.4	clear	10,000	
			Bund 3	23.5	7.19	40.1	47.6	61.5	clear	10,000	
			Bund 5	23.2	7.08	34.3	43.6	60.8	clear	25,000	
			Bund 6	22.9	7.10	33.1	41.2	59.9	clear	25,000	
			Bund 7	23.4	7.20	34.5	40.2	56.7	clear	10,000	
			Bund 8	23.8	6.92	33.9	39.8	52.1	clear	10,000	
			Bund 9	23.9	6.95	33.7	39.7	51.9	clear	10,000	
165	26.04.2022	26.04.2022	Bund 1	19.2	7.03	47.8	71.2	48.7	clear	10,000	
			Bund 2	19.6	7.18	51.2	60.4	51.6	clear	10,000	
			Bund 3	20.1	7.42	53.6	69.8	50.1	clear	10,000	
			Bund 5	19.8	7.09	49.2	77.4	50.3	clear	25,000	
			Bund 6	19.4	6.94	61.4	52.6	48.6	clear	25,000	
			Bund 7	20	7.86	55.4	61.7	55.1	clear	10,000	
			Bund 8	19.3	7.32	60.1	70.8	44.2	clear	10,000	
			Bund 9	19.6	6.73	48.6	66.7	40.9	clear	10,000	
166	5/10/2022	5/10/2022	Bund 1	20.2	7.41	38.2	46.7	62.3	clear	10,000	
			Bund 2	20.7	7.87	46.7	42.4	60.7	clear	10,000	
			Bund 3	20.4	7.12	31.3	61.3	66.2	clear	10,000	
			Bund 5	21.1	7.36	44.2	67.2	51.9	clear	25,000	
			Bund 6	20.2	7.82	50.6	58.7	60.9	clear	25,000	
			Bund 7	20.9	7.03	48.7	60.6	55.1	clear	10,000	
			Bund 8	20.5	7.66	33.4	49.5	56.7	clear	10,000	
			Bund 9	20.7	7.24	39.8	55.2	50.3	clear	10,000	
167	23/05/2022	23/05/2022	Bund 1	20.5	8.2	20.8	62.3	30.1	clear	15,000	
			Bund 2	20.2	8.1	21.1	57.6	22.7	clear	15,000	
			Bund 3	20.1	7.85	22.3	60.1	29.5	clear	15,000	
			Bund 5	19.5	7.68	23.8	55.3	25.2	clear	40,000	
			Bund 6	19.4	7.15	25.7	48.9	28.6	clear	40,000	
			Bund 7	19.9	7.2	24.2	45.6	33.4	clear	15,000	
			Bund 8	20	6.96	25.9	42.4	37.8	clear	15,000	
			Bund 9	20.1	6.85	26.4	45.2	39.9	clear	15,000	
168	20/06/2022	20/06/2022	Bund 1	21	8.5	20.9	66.3	32.1	clear	20,000	
			Bund 2	20.8	8.32	22.3	59.7	28.9	clear	20,000	
			Bund 3	20.5	8.14	23.8	62	29.7	clear	20,000	

	Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (uS/cm)	Appearance	Volume (L) Approx.	Comments
			Bund 5	19.2	7.9	26.7	58.5	26.2	clear	40,000	
			Bund 6	19.6	7.77	25.4	49.8	31.4	clear	40,000	
			Bund 7	20.1	7.35	25.1	48.2	35.5	clear	15,000	
			Bund 8	20.2	7.2	26.5	45.1	39.7	clear	15,000	
			Bund 9	20.4	6.95	28.2	44.6	41.9	clear	15,000	
169	4/07/2022	4/07/2022	Bund 1	19.2	7.89	24.8	58.7	36.1	clear	20,000	
			Bund 2	19	7.82	25.3	56.5	33.8	clear	20,000	
			Bund 3	19.4	7.65	27.4	60.2	29.5	clear	20,000	
			Bund 5	18.9	7.42	28.8	59.9	25.6	clear	50,000	
			Bund 6	18.8	7.55	30.2	50.8	35.3	clear	50,000	
			Bund 7	19.2	6.83	29.5	48.7	39.8	clear	20,000	
			Bund 8	19.5	6.57	26.6	42.5	41.0	clear	20,000	
			Bund 9	19.6	6.48	28.9	43.6	44.1	clear	20,000	
170	25/08/2022	25/08/2022	Bund 6	14.1	8.28	43.00	65.1	65.8	clear	5,000	
			Bund 7	13.8	8.32	40.4	63.3	62.2	clear	5,000	
			Bund 8	13.8	8.36	41.2	53.6	63.5	clear	10,000	
			Bund 9	13.9	8	41.9	67.7	64.1	clear	10,000	
171	16.09.2022	16.09.2022	Bund 1	20.2	7.95	22.4	44.7	32.6	clear	5,000	
			Bund 2	20.5	7.97	25.7	45.8	33.7	clear	5,000	
			Bund 3	20.2	8.20	22.9	53.2	33.9	clear	5,000	
			Bund 5	20.8	8.14	28.3	45.1	29.7	clear	10,000	
			Bund 6	21.0	8.01	24.6	49.4	28.1	clear	5,000	
			Bund 7	20.9	7.84	20.1	59.8	27.4	clear	5,000	
			Bund 8	21.2	7.35	27.3	46.3	31.9	clear	5,000	
			Bund 9	21.2	7.48	28.1	48.1	32.3	clear	5,000	
172	10/06/2022	6/10/2022	Bund 1	18.2	7.68	29.6	61.2	38.7	clear	8,000	
			Bund 2	18.6	7.16	28.4	73.4	40.2	clear	8,000	
			Bund 3	18.3	7.28	29.2	56.7	41.6	clear	8,000	
			Bund 5	18.9	7.56	22.7	60.1	39.9	clear	12,000	
			Bund 6	18.3	7.91	25.3	55.8	40.7	clear	8,000	
			Bund 7	18.7	7.84	28.1	71.7	38.6	clear	8,000	
			Bund 8	18.2	7.36	26.2	51.3	40.9	clear	8,000	
			Bund 9	18.4	7.46	27.5	59.8	44.6	clear	8,000	
173	10/10/2022	10/10/2022	Bund 1	17.5	6.96	19.6	119.3	29.0	clear	20,000	
			Bund 2	16.8	7.71	15.5	113.8	23.8	clear	20,000	
			Bund 3	16.6	7.61	17.2	117.1	26.4	clear	20,000	
			Bund 5	16.4	7.58	13.6	118.3	20.9	clear	40,000	
			Bund 6	16.4	7.44	14.8	120.2	22.8	clear	20,000	
			Bund 7	16.6	7.41	19.8	121.4	30.3	clear	15,000	
			Bund 8	16.3	7.45	25.1	121.1	38.5	clear	15,000	
			Bund 9	16.3	7.51	22.9	119.3	35.2	clear	15,000	
174	24.10.22	24.10.22	Bund 1	20.7	7.64	39.6	64.2	32.7	clear	15,000	
			Bund 2	20.4	7.17	48.7	60.9	30.4	clear	15,000	
			Bund 3	20.9	7.24	41.2	66.7	33.9	clear	15,000	
			Bund 5	20.2	6.98	46.3	58.3	31.6	clear	15,000	
			Bund 6	20.5	7.04	38.4	70.2	36.7	clear	15,000	
			Bund 7	20.3	7.13	37.2	71.6	30.8	clear	15,000	
			Bund 8	20.7	7.26	40.4	64.8	31.9	clear	15,000	
			Bund 9	20.6	7.31	40.9	61.2	38.6	clear	15,000	
175	14/11/22	14/11/22	Bund 1	22.1	8	24.7	67.3	37.2	clear	10,000	
			Bund 2	22	7.92	24.2	66.4	35.6	clear	10,000	
			Bund 3	21.9	7.89	23.8	68.1	36.7	clear	10,000	
			Bund 5	20.6	8.2	24.8	65.6	38.4	clear	20,000	
			Bund 6	20.8	8	25.2	67.1	39.1	clear	20,000	
			Bund 7	21.5	7.65	26.3	59.4	36.7	clear	10,000	



	Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (uS/cm)	Appearance	Volume (L) Approx.	Comments
			Bund 8	21.3	7.89	24.5	62.2	39.8	clear	15,000	
			Bund 9	21.3	8.1	23.7	63.5	40.2	clear	15,000	
176	19/12/22	19/12/2022	Bund 1	22.3	7.99	39.6	61.1	32.8	clear	5,000	
			Bund 2	21.5	7.55	40.8	64.8	35.6	clear	5,000	
			Bund 3	20.9	7.63	41	70.2	38.4	clear	5,000	
			Bund 5	21.3	7.9	37.3	60.9	36.7	clear	5,000	
			Bund 6	21.2	8.1	41.2	61.2	40.2	clear	5,000	
			Bund 7	22.1	7.85	44	60.9	36.7	clear	5,000	
			Bund 8	21.2	7.91	40.9	59.4	35.6	clear	5,000	
			Bund 9	21.3	8	40.4	61.1	31.9	clear	5,000	



### First Flush Results (Max Capacity 38,500 Litres) 2022

	Samples Collected:	Samples Tested:	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS)	Volume (L)	Comments	
2022	191	6/01/2022	7/01/2022	7.10	< 2	7.43	8	20,000	Release 10 Jan
	192	17/01/2022	18/01/2022	7.38	< 2	7.17	6	25,000	Release 19 Jan, results rec'd late PM 18 Jan
	193	14/02/2022	15/02/2022	7.00	< 2	7.02	5	35,000	Release 16 Feb
	194	1/03/2022	2/03/2022	8.20	< 2	7.57	26	35,000	Release 02 Mar - TSS limit 30
	195	3/07/2022	3/08/2022	6.80	< 2	7.44	9	35,000	Release 09 Mar
	196	22.03.2022	23.03.2022	8.40	< 2	7.73	5	5,000	Released 23 Mar PM
	197	28.03.2022	29.03.2022	8.00	< 2	7.24	5	35,000	Release started 29 Mar PM
	198	4/08/2022	4/11/2022	8.20	< 2	7.30	5	30,000	Release started 11 Apr PM
	199	26.04.2022	27.04.2022	8.20	< 2	7.37	5	30,000	Release started 27 Apr PM
	200	4/10/2022	4/11/2022	7.20	< 2	7.85	11	25,000	Release started 12 May PM
	201	26.04.2022	27.04.2022	8.20	< 2	7.37	5	30,000	Release started 27 Apr PM
	202	5/10/2022	5/11/2022	7.20	< 2	7.85	11	30,000	Release started 11 May
	203	24.05.2022	25.05.2022	8.80	< 2	7.56	9	30,000	Release started 25 may
	204	6/06/2022	6/06/2022	8.30	< 2	7.54	5	30,000	Release started 08 jun AM
	205	20/06/2022	20/06/2022	7.80	< 2	7.45	17	30,000	Release started 13:30 21/06/22
	206	28.06.2022	28.06.2022	7.20	< 2	6.85	5	30,000	Release started 29 Jun AM
	207	7/04/2022	7/05/2022	9.50	< 2	7.32	10	30,000	Release started 5 Jul PM
	208	7/11/2022	7/12/2022	10.90	< 2	7.42	20	30,000	Release delayed due shipping, anticipate release 14/07 AM
	209	20.07.2022	21.07.2022	9.00	< 2	7.52	31	0	NO RELEASE - hold and recirculate
	210	25.07.2022	26.07.2022	7.40	< 2	7.65	13	25,000	Resteted & Release started 27 Jul AM
	211	8/08/2022	8/09/2022	7.00	4	7.66	9	25,000	Release delayed due shipping, release 11/08 AM
	212	25.08.2022	26.08.2022	7.00	< 2	7.17	21	25,000	Release delayed due shipping, release 29/08 AM
	213	9/01/2022	9/02/2022	8.00	< 2	7.61	16	20,000	Release started 11:30hrs 02 Sept.
	214	9/05/2022	9/06/2022	8.60	< 2	7.50	6	20,000	Release started 10:30hrs 06 Sept.
	215	16.09.2022	16.09.2022	6.80	< 2	7.38	22	20,000	Results received 19/09 - release started 10:30hrs 19th Sept
	216	26.09.2022	27.09.2022	8.60	< 2	8.03	17	20,000	Results received 27/09 - release 28/09
	217	10/06/2022	10/07/2022	7.60	< 2	7.28	27	35,000	Results received 07/10 late PM - release started 08:00hrs 10th Oct
	218	21.10.2022	24.10.2022	7.90	< 2	7.46	8	35,000	Results received 25/10 late PM - release being delayed until post shipping event 26/10
	219	11/08/2022	11/09/2022	8.50	< 2	7.17	5	15,000	Results received 09/11 late PM - release started 08:30hrs 10/11
	220	14.11.2022	15.11.2022	6.80	< 2	7.58	9	15,000	Results received 14/11 late PM - release started 06:30hrs 15/11
	221	28.11.2022	28.11.2022	4.70	< 2	7.82	10	15,000	Results received 29/11 AM - release started 12:30hrs 29/11
	222	19.12.2022	20.12.2022	7.00	< 2	7.84	5	15,000	Results received 22/12 PM - release started 07:30hrs 21/12
2023	223								
	224								
	225								
	226								
	227								
	228								
	229								
	230								

**Stolthaven 2022 Throughput Totals (in litres)**

Customer A	Import	Diesel	354,964,517
		<b>Total</b>	<b>354,964,517</b>
	Export	G10	408,381,918
<b>Total</b>		<b>408,381,918</b>	

Customer B	Import	Nemo Additive	0
		Diesel	600,757,016
		<b>Total</b>	<b>600,757,016</b>
	Export	DL 10-U	400,262,434
		DL10-FIL	162,893,962
		DLXTR-FIL	0
		DL Extra (additive incl)	10,525,372
		VP DIESEL (additive incl)	0
		PREM DSL	575,051
		<b>Total</b>	<b>574,256,819</b>

Customer C	Import	Diesel	8,342,910
		<b>Total</b>	<b>8,342,910</b>
	Export	G10	19,973,492
<b>Total</b>		<b>19,973,492</b>	

Site Management	Export	Slops (waste)	<b>306,885</b> Ex ST1
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<b>Total Volume</b>			
Import (received/stored)	Diesel	964,064,443	
	<b>Total</b>	<b>964,064,443</b>	
Export (dispatched)	Diesel	1,002,612,229	
	Slops (waste)	306,885	
	<b>Total</b>	<b>1,002,919,114</b>	



# **Appendix I**

**IEA response to recommendations**

Mr Ryan Duckmanton  
Site Manager  
Stolthaven Newcastle  
Awabakal Country  
Lot 2 Steelworks Road  
MAYFIELD NORTH NSW 2304

20/07/2022

Dear Mr Duckmanton

**Stolthaven Mayfield Terminal (SSD-7065)  
2022 Independent Environmental Audit**

Reference is made to the Independent Environmental Audit (IEA) report and Response to Audit Recommendations (RAR) for the Stolthaven Mayfield Terminal, submitted as required by Schedule 4 condition 9 of development consent SSD-6664 and condition D10 of development consent SSD-7065 (the consents) to the Department of Planning and Environment (the department) on 28 April 2022.

The department considers the IEA report to generally satisfy the reporting requirements of the consent/approval. Please note that acceptance of this report is not an endorsement of the compliance status of the project.

Non-compliances identified in the IEA have been assessed in accordance with the department's Compliance Policy with the department on this occasion, determining to record the breaches with no further enforcement action. However, please note that recording the breach does not preclude the department from taking alternative enforcement action, should it become apparent that an alternative response is more appropriate.

Please make a copy of the IEA report and RAR available on the company website, as required by condition D15 of SSD-7065.

Finally, please include a status update for all actions provided in the RAR in the next Annual Review, until all actions are completed.

Should you wish to discuss the matter further, please contact Ann Hagerthy, Senior Compliance Officer on 02 6575 3407 or [compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

Yours sincerely



Heidi Watters  
Team Leader Northern  
Compliance

As nominee of the Planning Secretary

# Stolthaven Australasia Pty Ltd



A subsidiary of  
Stolt-Nielsen Limited

PO Box 304  
Wickham, NSW 2293  
Australia

Tel: +61 3 498 762 177  
www.stolt-nielsen.com

28 April 2022

NSW Government  
Department of Planning & Environment  
PO Box 3145  
Singleton NSW 2330  
[compliance@planning.nsw.gov.au](mailto:compliance@planning.nsw.gov.au)

**Attention: Heidi Watters**

Subject: Independent Environmental Audit Response to Recommendation  
Reference : Development Consents SSD 6664 & SSD 7065

This letter is provided in response to the recommendations noted at Section 4 of the April 2022 Independent Environmental Audit (Audit) of the Stolthaven Fuel Storage Facility (the Facility) at Steelworks Rd, Mayfield, NSW. The Audit is required under the Conditions of Project Approval for SSD 6664, Schedule 4, Condition 8 (consent surrendered during the audit period) and SSD 7065 Schedule D, Condition D12, outlining Stolthaven's response to the recommendation contained within the Audit. Stolthaven Responses to Recommendations of the Audit are as follows:-

Condition ID	Recommendation	Response
SSD 7065 – B2 SSD7065 – D7	Include a description of the complaints management in the LMP at the next update or reference to the procedure in the Environmental Management Plan.	The Stolthaven Landscape Management Plan to be amended to include complaints management at the next review date – June 2022.
SSD 6664 – 2-2 SSD 6664 – 4-2	Include a description of the complaints management in the LMP at the next update or reference to the procedure in the Environmental Management Plan.	As above
SSD 7065 – C44	Undertake a review of the SWMP prior to commencement of further works under SSD 7065 to ensure it is consistent with the <i>Managing Urban Stormwater Guidelines</i> , including the addition of figures where relevant.	Noted, plan to be reviewed prior to commencement of further works under SSD 7065. Action recorded site's action register.
SSD 7065 – C45	Given the results of the groundwater monitoring as described in <b>Section 3.6.1</b> , it is recommended that the WMP is updated in consultation with the Site Auditor and the PON to include specific triggers for pH (time and/or value based) that clearly define when further investigations or actions are required.	Stolthaven will review in consultation with the Site Auditor & PoN as recommended. The Water Management Plan will be amended following any agreed outcome.

If you require any additional information or clarification in relation to the above, please contact the under-signed by email on [R.Duckmanton@stolt.com](mailto:R.Duckmanton@stolt.com)

Kind Regards,

  
Ryan Duckmanton  
Stolthaven Newcastle – Site Manager  
Mob: 0498 762 177 Email: [R.Duckmanton@stolt.com](mailto:R.Duckmanton@stolt.com)



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