

Annual Review

Stolthaven Bulk Fuel Storage Facility



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Client: Stolthaven Australasia Pty Ltd

ABN: 26 075 030 992

Prepared by

AECOM Australia Pty Ltd

17 Warabrook Boulevard, Warabrook NSW 2304, PO Box 73, Hunter Region MC NSW 2310, Australia

T +61 2 4911 4900 F +61 2 4911 4999 www.aecom.com

ABN 20 093 846 925

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Prepared by Alison O'Neill

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1.0 Introduction

This Annual Review has been prepared by AECOM Australia Pty Ltd (AECOM) on behalf of Stolthaven Australia Pty Ltd (Stolthaven) to assess the environmental performance of the fuel import, storage and dispatch facility (the Site) on industrial land managed by the Port of Newcastle (PON), Newcastle, New South Wales. The Site is operated under the State Significant Development (SSD) development consent SSD_6664 issued on 16 April 2015 under Part 4 of the *Environmental Planning and Assessment Act* (EP&A Act). The Site was originally approved under the now superseded Part 3A of the EP&A Act, under Project Approval MP08_130 which has now been relinquished.

In accordance with Schedule 4 Condition 5 of SSD_6664, this Annual Review has been prepared to assess the environmental performance of the Site to the satisfaction of the Director-General. The Department of Planning and Environment (DP&E) requested (in a letter dated 16/2/16) that the reporting period for the AEMR be adjusted to align with calendar periods (1 January – 31 December). The DP&E also requested that this 2015 AEMR be revised to incorporate the reporting period from 1 November 2014 – 31 December 2015. This AEMR therefore incorporates the reporting period from 1 November 2014 – 31 December 2015. The reporting period for future AEMRs will be 1 January – 31 December.

This Annual Review provides:

- An overview of the Site (**Section 2.0**);
- A description of the operations carried out over the past calendar year (2015) which represents the reporting period (**Section 2.2**);
- Analysis of the environmental monitoring results for the reporting period and a comparison of these results with relevant performance criteria and previous data (**Sections 3.0 to 7.0**);
- Identification of any non-compliances throughout the reporting period and actions taken to rectify the issue (**Section 9.0**);
- Identification of trends in monitoring data over the life of the Site (**Sections 3.0 to 7.0**); and
- A summary of recommendations to improve the environmental performance of the Site (**Section 11.0**).

Construction of the Site was largely completed in December 2013, with operations commencing in the same month. Monitoring data for the environmental parameters assessed in this report are therefore only available for the past 2 years. Any trends identified in monitoring data will be limited by the currently small data set. As monitoring continues over the life of the Site, the reliability of any trends identified in monitoring data will improve with larger data sets being available.

1.1 Site Location and Description

The Site is located on part of the former BHP Steelworks Site, approximately 5 km north-west of Newcastle CBD. The land on which the Site is located is leased from the PON and is currently subject to concept approval MP 09_0096 by PON (Mayfield Concept Approval Submission). The Site is located within the Port of Newcastle, and the area surrounding the Site is characterised by a mixture of port related activities, industrial uses and residential and commercial areas. The Site is situated on the southern bank of the South Arm of the Hunter River, opposite industrial and port operations on Kooragang Island (**Figure 1**). The site and adjoining land is topographically flat and lies at approximately 1.89m Australian Height Datum.

The storage terminal consists of:

- Ship unloading facilities at the Mayfield Berth 4 (M4) wharf facility;
- A delivery pipeline from M4 to the terminal;
- Seven (7) storage tanks from 460m³ to 16,350m³ as summarised in **Table 1**;
- Two further storage tanks are under construction approx. 16,350m³
- A four (4) bay automated truck loading and unloading facility;
- Pumping capacity for bulk tanker (truck loading);

- Appropriate drainage and spill containment systems; and
- Fire protection systems.

The approved terminal layout is provided in **Figure 2**.

Table 1 Schedule of Fuels Storage Tanks

Tank ID No.	Design Product	Tank Diameter	Shell Height (m)	Usable Volume (m ³)
1	Diesel	36.6	17.1	16,350
2	Diesel	36.6	17.1	16,350
3	Diesel	36.6	17.1	16,350
4	Biodiesel	7.6	12	460
5	Diesel	36.6	17.1	16,350
6	Diesel	36.6	17.1	16,350
7	Biodiesel	18	17	3,970

1.2 Site History

The Site is located on part of the former BHP Steelworks Site. BHP was located on the site from 1915 to 1999. In 2002, ownership of that part of the former Steelworks Site known as the Closure Area Site was transferred to the State Government. In March 2007, the Hunter Development Corporation (HDC) (formerly the Regional Land Management Corporation Pty Ltd) was created by the Government to manage the day-to-day activities of the former BHP site and other Crown lands in the Lower Hunter Region, including remedial and redevelopment works for the Closure Area Site (SKM 2004).

On 14 June 2001, under former Section 21 of the *Contaminated Land Management Act 1997* (CLM Act), the Environment Protection Authority (EPA) declared the Closure Area Site to be a remediation site. A Remediation Action Plan (RAP) was prepared by SKM in 2004 to address contamination issues associated with soils and groundwater. A Voluntary Remediation Agreement (VRA No 26025) for the remediation of the Site was issued by the EPA on 30 August 2005. HDC undertook to fulfil these remediation commitments.

In March 2008, a Contaminated Site Management Plan (CSMP) for the Closure Area Site was prepared by HDC. The CSMP provided a common framework to be applied across the whole of the site for the design, implementation, completion, use and maintenance of remediation and project works. In mid-2008, HDC completed Stage 1 of the remediation works. Stage 2 of the remediation works were subsequently completed in 2013.

Following a handover in ownership to the Newcastle Port Corporation (NPC), now PON, a Concept Plan application for the future strategic development of the former BHP 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.

Stolthaven was the first, and is the only, operation currently active on the former BHP site, having received initial approval for their Site in June 2012. PON also operates Mayfield No.4 berth (M4) within the Concept Plan area, which is a general purposes berth currently used by Stolthaven for the import of fuels.

1.3 Operations and Approval

The Site operates in accordance with SSD_6664 issued on 16 April 2015 under Part 4 of the EP&A Act. 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 below in sequence of approval history.

1.3.1 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. In summary, 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 18ML diesel and 3ML biodiesel) with a total permitted annual throughput of 300 ML combined;
- Distribution of fuels by road tankers; and
- 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 – Two additional 18ML diesel tanks, one additional 4.2ML biodiesel tank and an additional 100ML pa throughput. Approved 26 July 2013;
- MOD 2 – 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. Approved 15 November 2013; and
- MOD 3 – Increase throughput from 400ML pa to a total of 500ML pa. No additional tanks or infrastructure. Approved 10 July 2014.

1.3.2 Current Development Consent SSD_6664

During the reporting year Stolthaven applied to increase the throughput of the facility and to construct two additional storage tanks, and as a result a new SSD development consent was issued under Part 4 of the EP&A Act. The current SSD_6664 consent transferred the Site from a Part 3A approval to an SSD approval. One of the conditions of SSD_6664 included the requirement to surrender Project Approval MP08_0130. SSD_6664 Modification 1 was also approved. The current SSD_6664 consent permitted the Facility's capacity to be increased through an additional:

- Two 18ML diesel storage tanks; and
- Throughput to total 1,300ML pa.

Subsequent modification to SSD_6664 that occurred during the reporting period is detailed in **Section 2.2**.

1.3.3 Licence

The Site operates under Environment Protection Licence (EPL) 20193 which is administered by the NSW EPA under the *Protection of the Environment Operations Act 1997* (POEO Act). EPL 20193 permits the scheduled activities of Chemical Storage and Shipping in Bulk on the site.

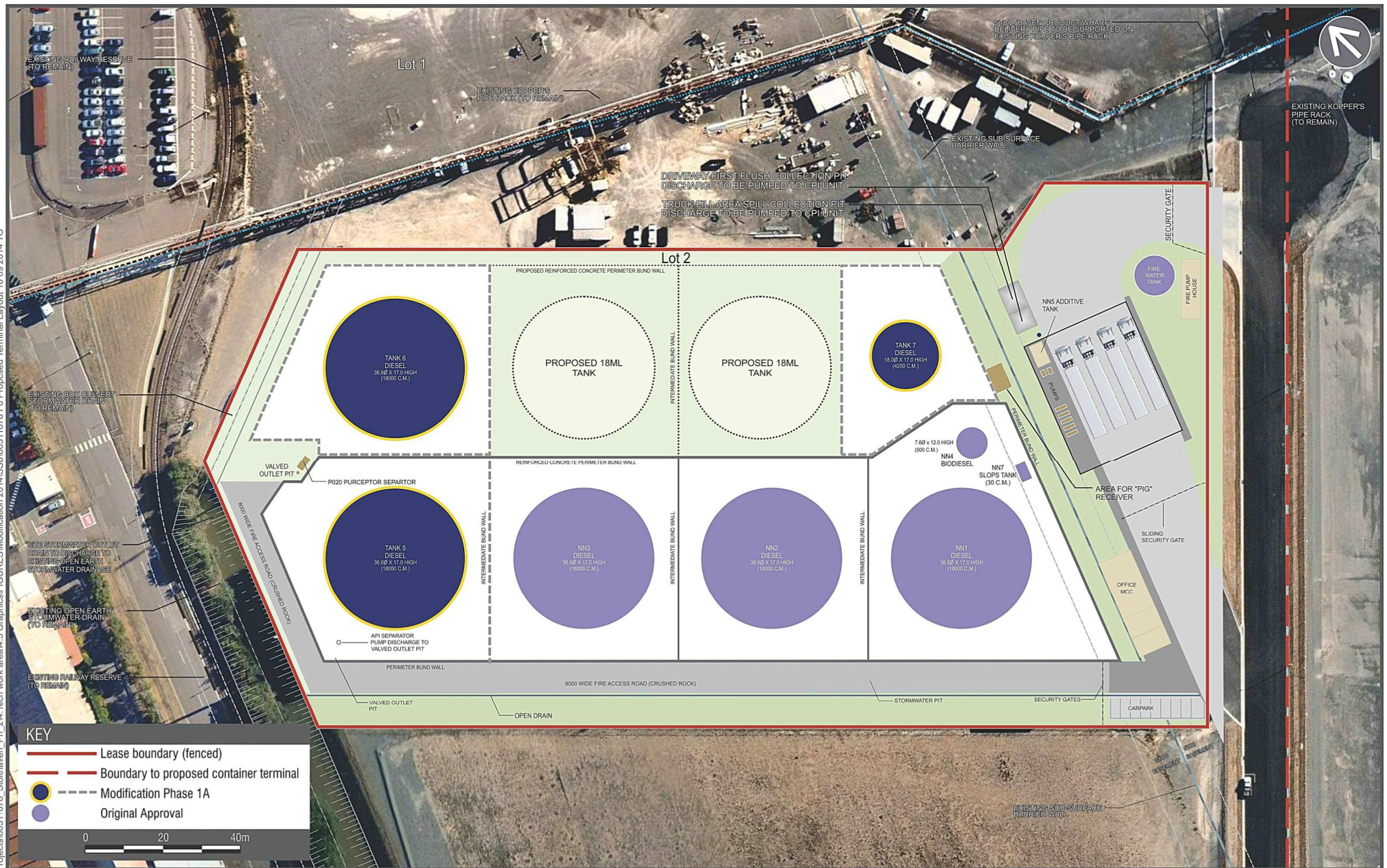
1.3.4 Other relevant approvals

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 Concept Plan area is to be developed progressively in stages to accommodate anticipated future trade needs over a 20-25 year timeframe.

Development Consent DA-293-08-00 MOD 9, dated 29 August 2013, is applicable to the M4 berth, and ships filling or depositing at this berth must comply with relevant conditions of this consent (e.g. operational noise limits).



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2.0 Site Operations

2.1 Description of Operations

Operations undertaken at the Site include the receipt, storage and dispatch of bulk diesel and biodiesel loading, as well as bulk tanker loading at M4. The Site operates 24 hours a day, seven days a week. The Site is partially automated and manned with Stolthaven personnel undertaking daily inspections. Primary operations include:

- The bulk storage of diesel and biodiesel at the site in the storage tanks listed in **Table 1**;
- The bulk transfer of diesel fuel from berthed ships to the site's above ground storage tanks; and
- The filling of road tankers with diesel and biodiesel products for transfer to customers.

2.2 Major Operational Changes in 2015

Stolthaven made an application to increase the throughput of the facility and subsequently a new SSD development consent (SSD_6664) was issued on 16 April 2015. As previously described in **Section 1.3.2**, the SSD_6664 consent required the surrender of the original project approval and the facility now operates under SSD_6664. The current SSD_6664 consent allows for an increase in the facility's capacity through:

- An additional two 18ML diesel storage tanks and
- An increase in throughput to a total of 1,010ML per annum.

The additional diesel storage tanks are currently being constructed and have not yet been commissioned.

Following the approval of SSD_6664, Stolthaven made a modification to SSD_6664 to increase the annual throughput from 1,010 ML to 1,300 ML per year. The modification does not require an increase in storage capacity at the Site nor does it require construction of additional fuel storage tanks or associated infrastructure. This modification was approved on 28 September 2015.

Following the issue of SSD_6664 and its subsequent modification, variations were required to EPL 20193 under which the Site operates. Variations were issued on 14 May 2015, 27 August 2015 and 2 October 2015. These variations included administrative matters such as references to the approval documents, the change in site layout, changes to load limits as a result of the increase in throughput and some changes in monitoring requirements. On 2 October 2015, the approved annual throughput of petroleum products was amended to allow up to 1,300 ML per annum.

These changes have been reflected in site processes and the monitoring results are assessed against the current limits and criteria.

3.0 Groundwater

3.1 Groundwater Monitoring

Groundwater quality at the Site is managed in accordance with a groundwater monitoring program, adherence to the Site's Groundwater Management Plan (GMP) and the conditions of EPL 20193. Groundwater beneath the Site discharges into the Hunter River via groundwater migration.

Four groundwater monitoring wells were installed by Stolthaven in October 2013 (identified as Monitoring Points 1-4 in EPL 20193) and are identified as MW01, MW02, MW03 and MW04 in this report. The groundwater monitoring program consists of quarterly data collection and samples from the groundwater wells. Monitoring events are scheduled so that groundwater conditions beneath the Site are investigated during both wet and dry seasons. The schedule of groundwater monitoring wells is provided in **Table 2**.

Table 2 Groundwater Monitoring Points at the Site

EPA Identification Number	Type of Monitoring Point	Sampling Frequency
1	Groundwater	Quarterly
2	Groundwater	Quarterly
3	Groundwater	Quarterly
4	Groundwater	Quarterly

Background monitoring was conducted from October to November 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 before the commencement of operations. The results of background monitoring are included alongside groundwater monitoring results for the reporting period in **Section 3.2**.

Groundwater monitoring results are assessed against the site's 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 ANZECC (2000) *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 3**.

Samples are analysed for pollutants by a NATA accredited laboratory. Indicators of potential adverse groundwater quality impact will include (but are not limited to) the following:

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



Table 3 Groundwater Assessment Criteria

Compound	Units	ANZECC (2000) 95% Low Reliability Values	ANZECC (2000) 95% Trigger Values	EPL Concentration Limit
BTEX				
Benzene	(µg/L)	-	500	-
Ethylbenzene	(µg/L)	80	-	-
Toluene	(µg/L)	180	-	-
o-xylene	(µg/L)	350	-	-
p-xylene	(µg/L)	200	-	-
m-xylene	(µg/L)	80	-	-
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)	-	-	-
>C10-C16 Fraction – Naphthalene	(µg/L)	-	-	-

3.2 Groundwater Monitoring Results

Groundwater monitoring results are presented in **Table 4** to **Table 7** with commentary on the analysis provided below in **Section 3.3**.

3.2.1 MW01

Table 4 Groundwater Monitoring Results for MW01

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
pH								
pH	0.01	9.41	8.33	8.79	9.39	9.37	7.0 – 9.79	-
BTEX (µg/L)								
Benzene	1	<1	<1	<1	<1	<1	<1 to 5	500
Ethylbenzene	2	<2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2	<2	<2	<2	<2	<2	80
Total Recoverable Hydrocarbons (µg/L)								
C6-C10 Fraction	20	<20	<20	<20	<20	<20	<20	-

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
C6-C10 minus BTEX (F1)	20	<20	<20	<20	<20	<20	<20	-
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	<100 to 380	-
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	<100	-

3.2.2 MW02

Table 5 Groundwater Monitoring Results for MW02

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
pH								
pH	0.01	7.85	7.71	7.61	7.68	7.59	7.0 – 9.79	-
BTEX (µg/L)								
Benzene	1	1	<1	<1	<1	<1	<1 to 5	700
Ethylbenzene	2	<2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2	<2	<2	<2	<2	<2	80
Total Recoverable Hydrocarbons (µg/L)								
C6-C10 Fraction	20	<20	<20	<20	<20	<20	<20	-
C6-C10 minus BTEX (F1)	20	<20	<20	<20	<20	<20	<20	-
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	<100 to 380	-
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	<100	-

3.2.3 MW03

Table 6 Groundwater Monitoring Results for MW03

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
pH								
pH	0.01	8.43	8.44	8.31	8.57	8.71	7.0 – 9.79	-
BTEX (µg/L)								
Benzene	1	<1	<1	<1	<1	<1	<1 to 5	700
Ethylbenzene	2	<2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	<2	350
Xylene (m&p)	2	<2	<2	<2	<2	<2	<2	80
Total Recoverable Hydrocarbons (µg/L)								
C6-C10 Fraction	20	<20	<20	<20	<20	<20	<20	-
C6-C10 minus BTEX (F1)	20	<20	<20	<20	<20	<20	<20	-
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	<100 to 380	-
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	<100	-

3.2.4 MW04

Table 7 Groundwater Monitoring Results for MW04

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
pH								
pH	0.01	8.63	8.67	8.29	8.29	8.62	7.0 – 9.79	-
BTEX (µg/L)								
Benzene	1	<1	<1	<1	<1	<1	<1 to 5	700
Ethylbenzene	2	<2	<2	<2	<2	<2	<2	80
Toluene	2	<2	<2	<2	<2	<2	<2	180
Xylene (o)	2	<2	<2	<2	<2	<2	<2	350

Analyte	Laboratory Limit of Reporting	7/11/14	05/02/15	12/05/15	12/08/15	17/11/15	Background Range	GAC
Xylene (m&p)	2	<2	<2	<2	<2	<2	<2	80
Total Recoverable Hydrocarbons (µg/L)								
C6-C10 Fraction	20	<20	<20	<20	<20	<20	<20	-
C6-C10 minus BTEX (F1)	20	<20	<20	<20	<20	<20	<20	-
>C10-C16 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C16-C34 Fraction	100	<100	<100	<100	<100	<100	<100 to 380	-
>C34-C40 Fraction	100	<100	<100	<100	<100	<100	<100	-
>C10-C16 Fraction – Naphthalene	100	<100	<100	<100	<100	<100	<100	-

3.3 Analysis of Results

A statistical trend analysis was undertaken for selected analytes at the four monitoring locations to determine if any 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, eleven data points are available for trend analysis with monitoring at the Site having commenced in October 2013.

A larger sample size (using data that will be gathered over future monitoring events) will give greater confidence to any trends identified below.

3.3.1 MW01

Recorded pH levels at MW01 for this reporting period ranged from 8.33 – 9.41, remaining within background levels recorded at the Site. Trend analysis showed statistically significant evidence of a decreasing trend in pH at MW01 (refer **Figure 4**).

Total Recoverable Hydrocarbons (TRH) concentrations were below Laboratory Limits of Reporting (LOR) at MW01 and were consistent with background levels established for the Site.

BTEX concentrations were also below the LOR at this monitoring point and it appears that BTEX concentrations are stable below the LOR at MW01.

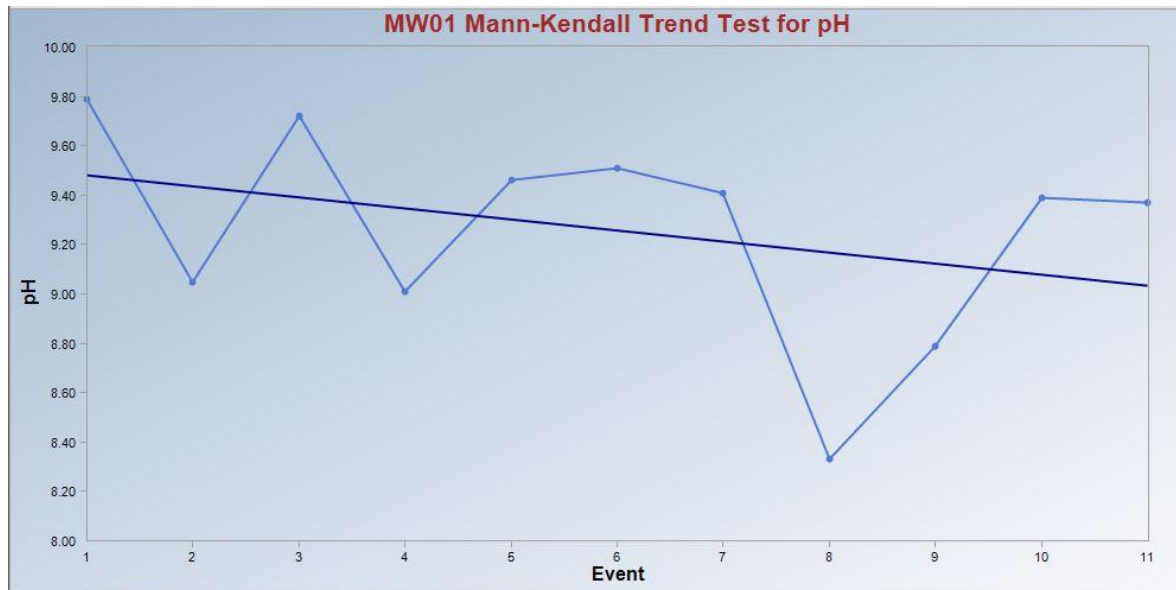


Figure 4 Statistical trend analysis for pH levels at MW01

3.3.2 MW02

Recorded pH levels at MW02 for this reporting period ranged from 7.59 – 7.85, remaining within background levels recorded at the Site. Trend analysis showed statistically significant evidence of a decreasing trend in pH at MW02 (refer **Figure 5**).

TRH concentrations were below the LOR at MW02 and were consistent with background levels established for the Site. TRH fractions have generally not been recorded at MW02 since monitoring at the Site began, apart from one recorded low concentration in the >C16-C34 fraction (380 µg/L) in October 2013. Overall, TRH concentrations appear to be stable at below LOR concentrations.

BTEX concentrations were also below the LOR at this monitoring point and it appears that generally BTEX concentrations are stable below the LOR at MW03. Higher concentrations of benzene have previously been recorded at MW02, however trend analysis showed statistically significant evidence of a decreasing trend in benzene concentration at MW02 (refer **Figure 6**). Benzene concentrations appear to have stabilised at below LOR concentrations over the last 6 monitoring events.

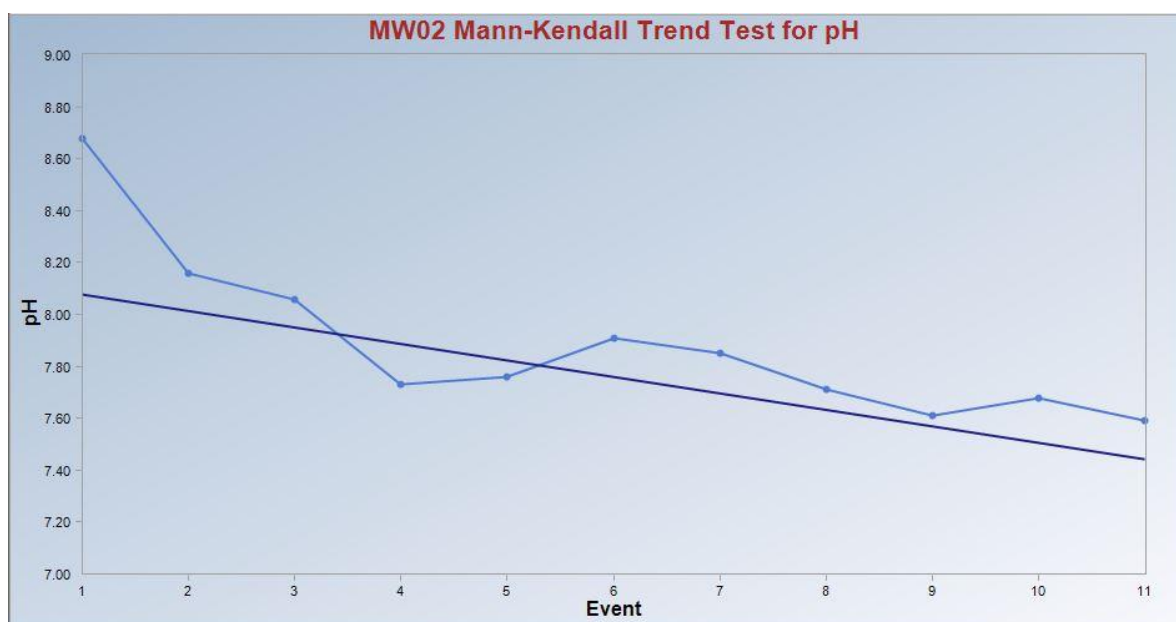


Figure 5 Statistical trend analysis for pH levels at MW02

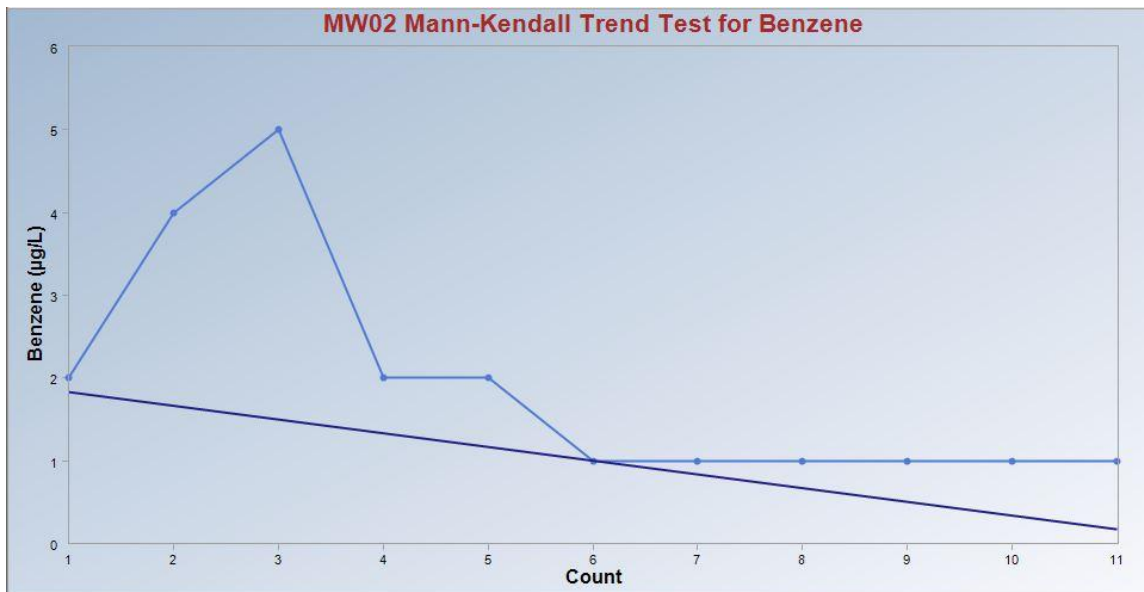


Figure 6 Statistical trend analysis for Benzene levels at MW02

3.3.3 MW03

Recorded pH levels at MW03 for this reporting period ranged from 8.31 – 8.71, remaining within background levels recorded at the Site. The pH values at MW03 have increased steadily since monitoring at the Site began. Trend analysis showed statistically significant evidence of an upward trend in pH at MW03 (refer **Figure 7**).

TRH concentrations were below the LOR at MW03 and were consistent with background levels established for the Site. TRH fractions have generally not been recorded at MW03 since monitoring at the Site began, apart from one recorded low concentration in the >C16-C34 fraction (180 µg/L) in October 2013. Overall, TRH concentrations appear to be stable at below LOR concentrations.

BTEX concentrations were also below the LOR at this monitoring point and it appears that BTEX concentrations are stable below the LOR at MW03.

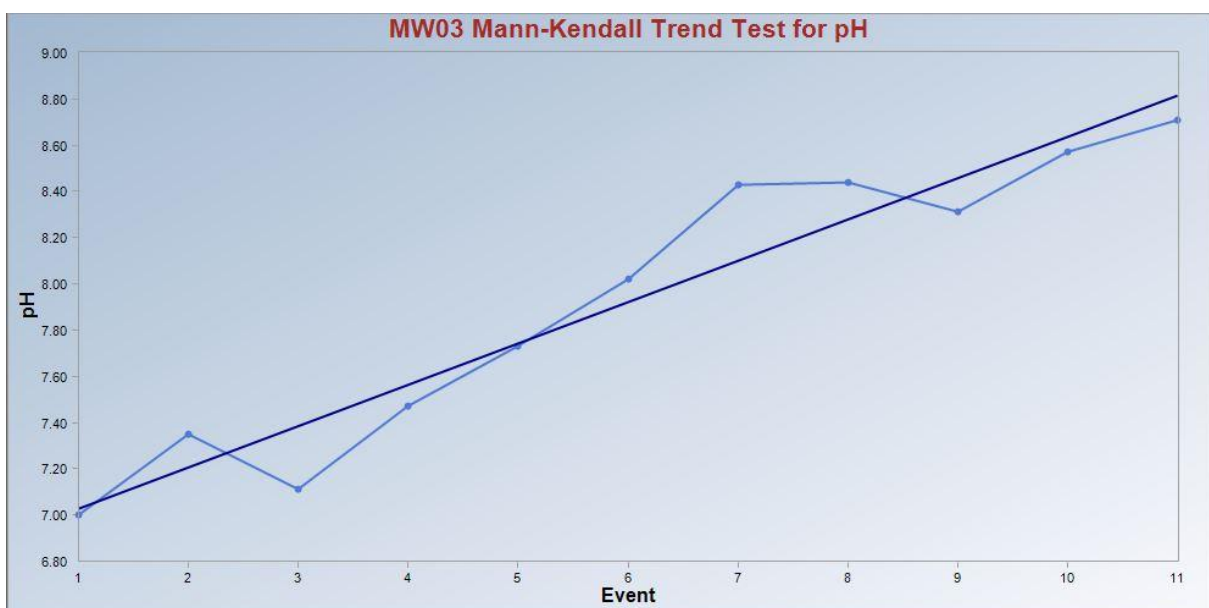


Figure 7 Statistical trend analysis for pH levels at MW03

3.3.4 MW04

Recorded pH levels at MW04 for this reporting period ranged from 8.29 – 8.67, remaining within background levels recorded at the Site. Trend analysis showed statistically significant evidence of a downward trend in pH at MW04 (refer **Figure 8**).

TRH concentrations were below the LOR at MW04 and were consistent with background levels established for the Site.

BTEX concentrations were also below the LOR at this monitoring point and it appears that BTEX concentrations are stable below the LOR at MW04.

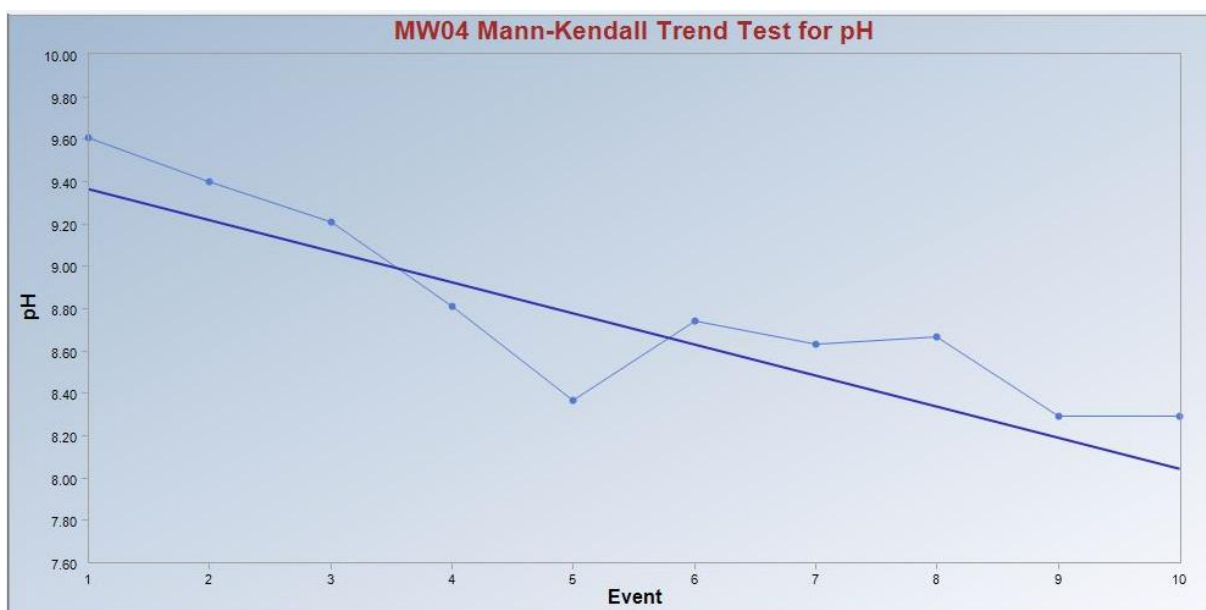


Figure 8 Statistical trend analysis for pH levels at MW04

3.4 Summary of Groundwater Results

Where appropriate, statistical trend analysis was undertaken on individual analytes at selected monitoring wells using an upper confidence level of 95%.

Trends in TRH and BTEX concentrations were largely non-calculable given the small dataset available and the high proportion of Non-Detect values in the data (caused by data points with results below LOR concentrations). A decreasing trend in benzene concentration was identified at MW02, however it is noted that benzene concentrations at MW02 appear to have stabilised at below LOR concentrations over the past six (6) monitoring events.

Some preliminary trends were identified for pH levels, including a decreasing trend at MW01, MW02, and MW04 and an increasing trend at MW03. Further data obtained during future monitoring events will confirm the reliability of the preliminary trends identified above.

4.0 Stormwater

4.1 Stormwater Monitoring

Monitoring of stormwater discharges is undertaken as part of the Site's Stormwater Management Plan (SWMP) to assess the efficiency 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; and
- Water quality is monitored after rainfall events.

Indicators of potential adverse water quality impacts as assessed through water quality monitoring 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; and
- Orange/brown coating on banks, water surfaces or substrate.

There are currently six 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 and Bund 7. 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 at the Site's licenced 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 a rainfall event that results in sufficient stormwater discharge to collect surface water samples.

The water samples at Point 5 are analysed prior to discharge for the pollutants as shown in **Table 8**. Concentration limits are taken from EPL 20193. Once water quality results are obtained for the water in the Puraceptor, water is discharged into the Hunter River via an outfall drain. If water quality is found to be noncompliant with the parameters prescribed in the site's EPL it is treated further and then retested until the water is of an acceptable quality to be discharged.

Table 8 Water Quality Criteria (EPL 20193)

Pollutant	Units of Measure	Frequency	Method	100 percentile concentration limit
Biological Oxygen Demand (BOD)*	Milligrams per litre	Weekly during any discharge	Grab sample	20
Dissolved Oxygen	Milligrams per litre	Weekly during any discharge	Grab sample	>2
Oil and Grease	Milligrams per litre	Weekly during any discharge	Grab sample	10
pH	pH	Weekly during any discharge	Grab sample	6.5 – 8.5
Total Suspended Solids	Milligrams per litre	Weekly during any discharge	Grab sample	30
Volume	Megalitres per day	Continuous during discharge	Special Method 1	-

* BOD was removed from the EPL criteria on 27 August 2015. The BOD criterion was applicable to monitoring undertaken prior to this date.

4.2 Stormwater Monitoring Results

Results from stormwater monitoring are presented below. Water quality results from the Site's licenced discharge point are presented in **Table 9** and water quality results from bund water sampling are summarised in **Table 10**. A full copy of the data from stormwater monitoring is provided in **Appendix A**.

Table 9 Discharged Water Quality Results (EPA Point 5)

Sample Date	Biological Oxygen Demand (BOD) (mg/L) ¹	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (mg/L)	Volume discharged (L)
Concentration Limit	20	>2	10	6.5-8.5	30	-
6/11/2014	4	6.28	<2	7	39 ¹	38,500
12/11/2014	-	-	-	-	5	(retest)
24/11/2014	17	1.31 ¹	<2	6.9	58 ¹	38,500
1/12/2014	-	7.55	-	-	3	(retest)
9/12/2014	3	6.8	<2	7.2	11	38,500
13/01/2015	6	6.84	<2	7.3	2	20,000
28/01/2015	14	8.23	<2	8	19	25,000
28/01/2015	3	8.6	<2	7.1	9	25,000
18/02/2015	<2	3.44	<2	6.9	19	25,000
2/03/2015	2	5.08	<2	7.4	23	25,000
10/04/2015	3	6.2	<2	7.1	20	38,500
1/05/2015	<2	10.6	7	7.32	5	30,000
12/06/2015	5	7.04	16	7.9	87	12,000
23/06/2015	<2	8.91	<2	7.3	8	15,000
1/07/2015	<2	8.55	14	7.7	32	35,000
20/07/2015	2.0	8.99	<2	7.60	53 ¹	35,000
27/07/2015	5	7.48	3	7.6	28	(retest)
24/08/2015	4	8.21	<2	8.4	28	35,000
21/09/2015	N/A ²	7.64	<2	7.4	3	35,000
12/10/2015	N/A ²	5.01	<2	6.8	51 ¹	35,000
15/10/2015	N/A ²	3.37	2	7	4	(retest)
4/11/2015	N/A ²	7.81	<2	7.3	34 ¹	35,000
7/11/2015	N/A ²	6.73	<2	7.3	12	(retest)
16/11/2015	N/A ²	6.09	3	7.3	1	35,000
11/12/2015	N/A ²	2.74	<2	7.0	20	35,000
21/12/2015	N/A ²	7.35	<2	7.5	2	35,000

Note 1: ¹ indicates an exceedance of the criteria; sample was treated, retested and complied with criteria.

Bold indicates an exceedance of the criteria; water was pumped out and removed by a licensed contractor.

Note 2: BOD was removed from the EPL criteria on 27 August 2015.

Table 10 Bund Water Quality Results

Parameter	Minimum	Maximum	Average
pH	6.87	8.58	7.4
Total Dissolved Solids (ppm)	0	185	47.8
Dissolved Oxygen (mg/L)	6.4	114	40.9
Conductivity (µS/cm)	0.1	271	74.4

4.3 Analysis of Results

4.3.1 Discharged Water Quality Results

The water quality results recorded at EPA Monitoring Point 5 are summarised in **Table 9** and are analysed below. While the water sampling identified some exceedances of the EPA criteria, the affected water was either: treated and retested until compliance was achieved, or the water was pumped out and removed off site by a licensed contractor. Water discharged from the site was compliant with all conditions of the Site's EPL.

The following sections identify trends that have emerged for each of the parameters. Considering the small sample size of available water quality data, it should be noted that only preliminary trends have been identified in the data and these trends could be subject to significant change in later reporting periods.

Biological Oxygen Demand (BOD)

The BOD concentrations recorded at Monitoring Point 5 complied with the Site's EPL criteria, remaining below the prescribed maximum concentration limit of 20 mg/L. The results for the reporting period are shown in **Figure 9** along with the historical BOD concentrations recorded at Monitoring Point 5. The average BOD concentration during the reporting period was 5.7 mg/L, with a maximum recorded concentration of 17 mg/L. With the exception of two monitoring events, BOD concentrations have remained within the range of 1 – 6 mg/L. The criterion for BOD was removed from EPL 20193 on 27 August 2015 and so results are only presented for monitoring events prior to that date.

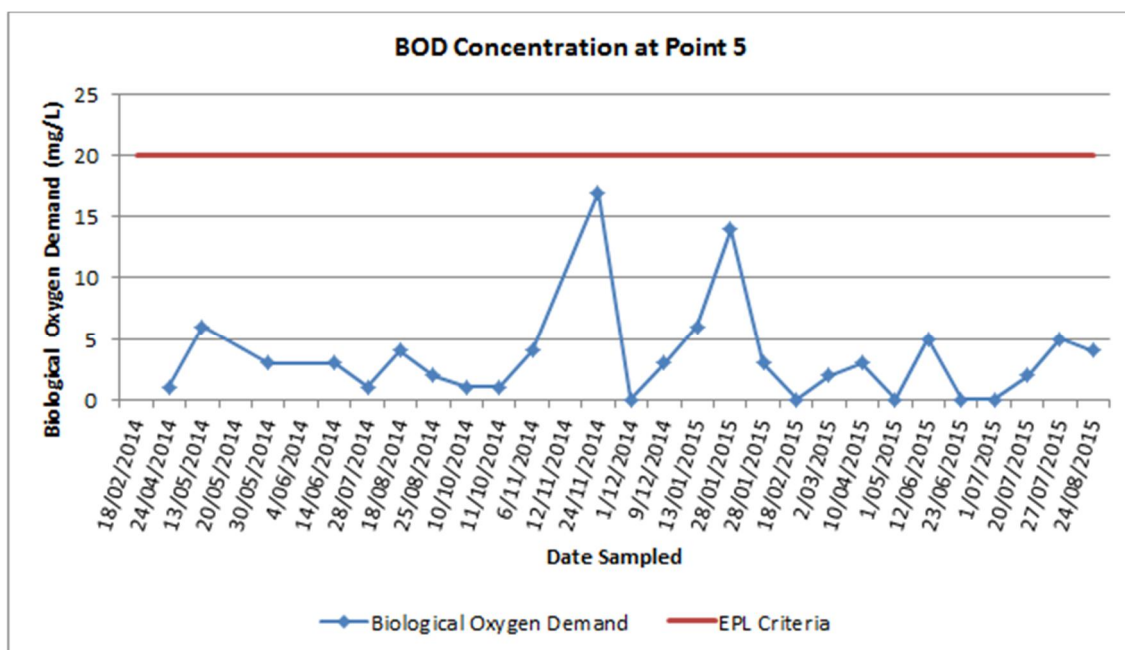


Figure 9 BOD levels at Monitoring Point 5

Dissolved Oxygen

The dissolved oxygen levels recorded at Monitoring Point 5 generally complied with the Site's EPL criteria, with results generally above the prescribed minimum concentration limit of 2 mg/L. There was one exceedance of the criteria on 24/11/2014 (1.3 mg/L); however the water was treated and retested and subsequently found to comply with the criterion. The results for the reporting period are shown in **Figure 10** along with the historical results for dissolved oxygen levels recorded at Monitoring Point 5. The average dissolved oxygen level recorded during the reporting year was 6.6 mg/L, with a minimum level of 1.3 mg/L. The historical results indicate that dissolved oxygen at Monitoring Point 5 is variable, with no apparent trend identified.

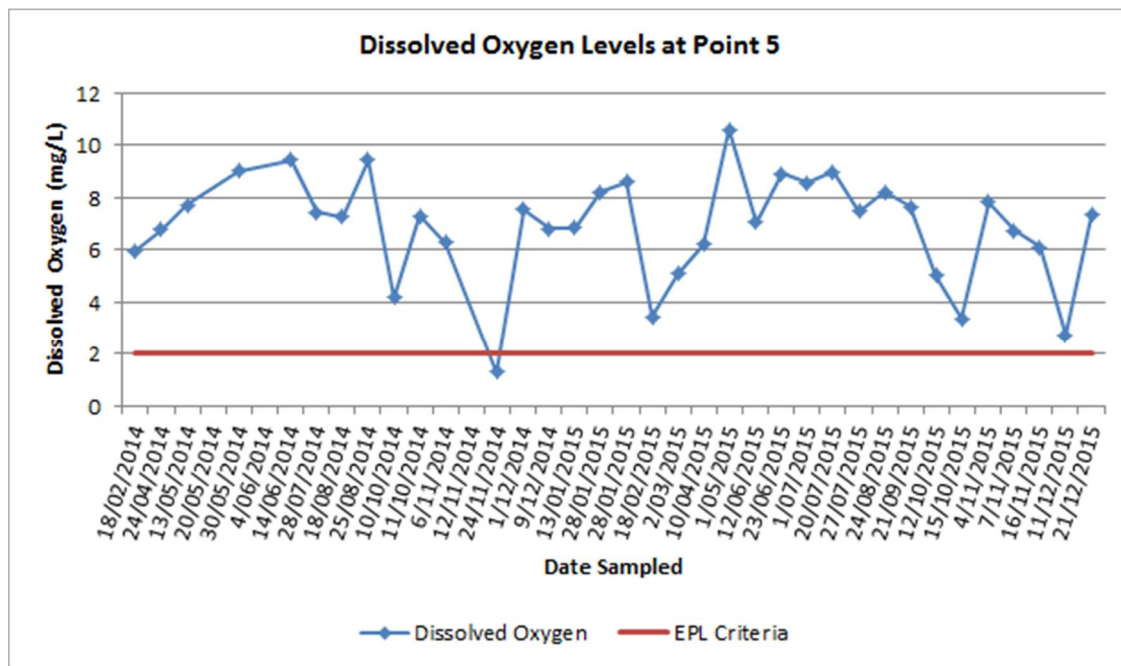


Figure 10 Dissolved Oxygen levels at Monitoring Point 5

Oil and Grease

The oil and grease levels recorded at Monitoring Point 5 during the reporting period were generally compliant with the EPL concentration limit of 10 mg/L. There were two exceedances of the criterion on 12/06/2015 and 01/07/2015. On both occasions the affected water was pumped out and removed off site by a licensed contractor. The results for the reporting period are shown in **Figure 11** along with the historical results for oil and grease levels recorded at Monitoring Point 5. The average level of oil and grease recorded during the reporting period was 7.5 mg/L, with a maximum of 16 mg/L. The results shown in **Figure 11** indicate that oil and grease levels generally remain below 3 mg/L.

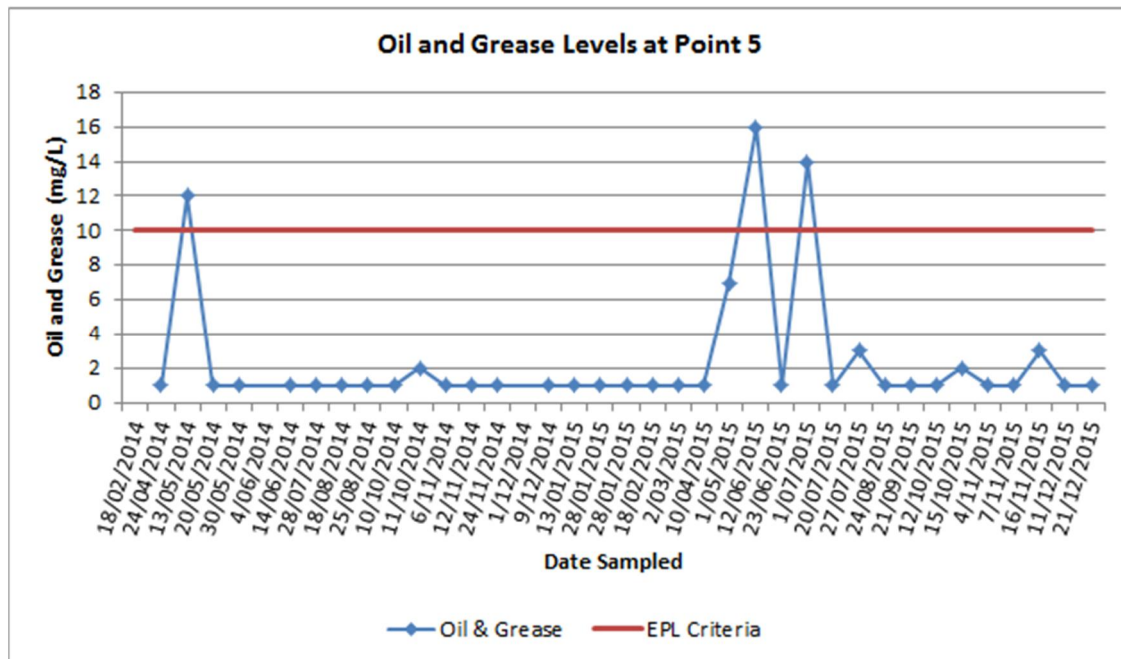


Figure 11 Oil and Grease levels at Monitoring Point 5

Note: Concentrations recorded as below the LOR for Oil and Grease (<2 mg/L) are represented as 1 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. The results for the reporting period are shown in **Figure 12** along with the historical results for pH levels recorded at Monitoring Point 5. During the reporting period, the average pH level recorded was 7.3, with a maximum recording of 8.4 and a minimum recording of 6.8. The historical results indicate that pH levels at Monitoring Point 5 generally remain within the range of 7 to 8.

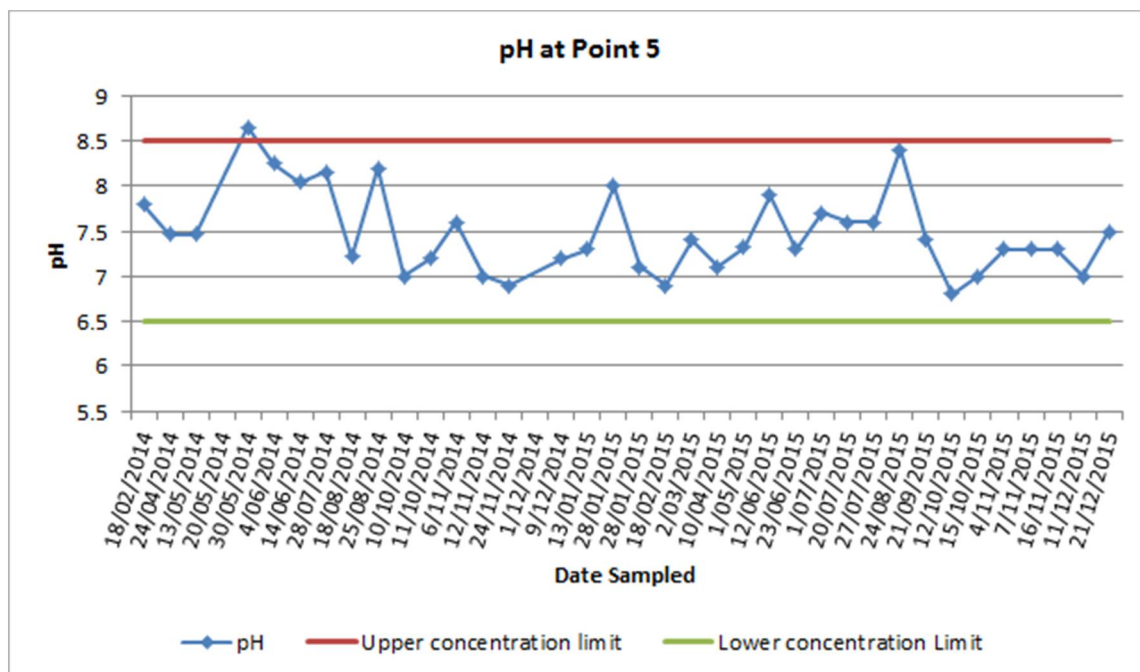


Figure 12 pH levels at Monitoring Point 5

Total Suspended Solids

The total suspended solids levels recorded at Monitoring Point 5 varied throughout the reporting period, with several exceedances of the EPL limit of 30 mg/L. Exceedances occurred on 6/11/2014, 24/11/2014, 12/06/2014, 01/07/2015, 20/07/2015, 12/10/2015 and 04/11/2015. On five occasions the affected water was treated, retested and subsequently complied with the EPL limit. However on two occasions the affected water was pumped out and removed off site by a licensed contractor.

Results for the reporting period are shown in **Figure 13** along with the historical results for total suspended solids levels recorded at Monitoring Point 5. During the reporting period, the average level of total suspended solids was 23.7, with a maximum recording of 87.0 mg/L. The historical results indicate that the level of total suspended solids at Monitoring Point 5 is variable, with no apparent trend identified.

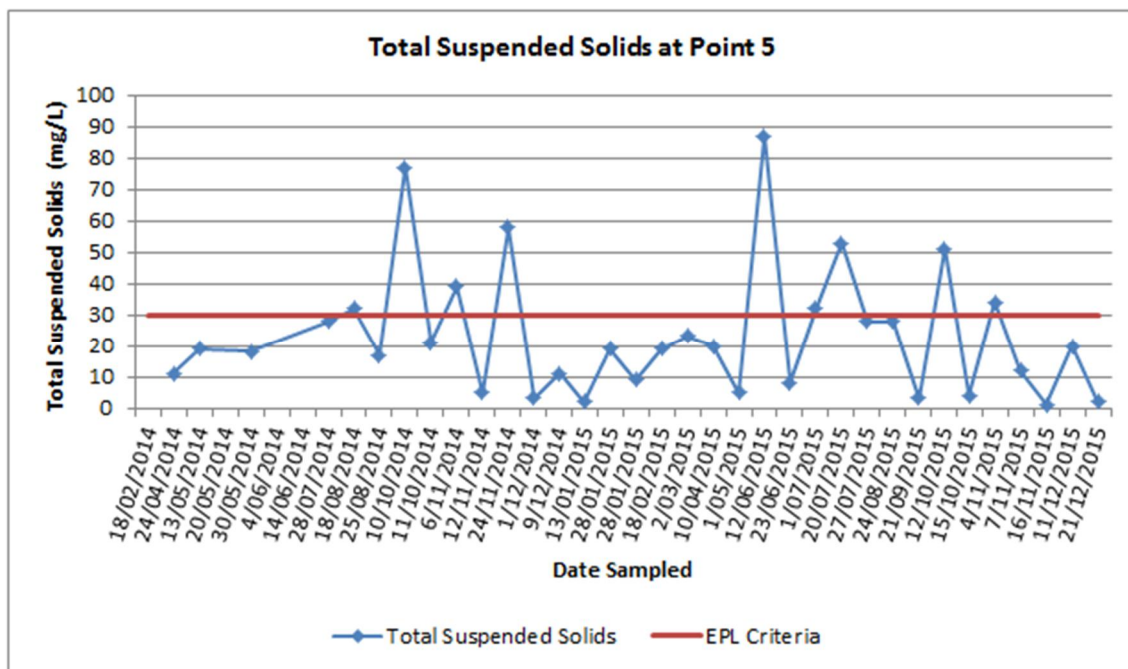


Figure 13 Total suspended solids levels at Monitoring Point 5

4.3.2 Bund Water Quality Results

The water quality results recorded for bund water following rainfall events are summarised in **Table 10** and are analysed below. There are currently no specific limits for bund water quality as they do not discharge into waterways. Bund water is sampled following rainfall and then treated before it is released through the Puraceptor out of the Site's licenced discharge point (Point 5) after water quality analysis confirms the water can be safely discharged into the Hunter River.

The following sections identify trends that have emerged for each of the parameters. Bund water quality has been compared against the Site's own baseline data and significant deviations from this baseline data are highlighted and assessed. In future reporting periods, the data series will grow in accuracy and bund water quality trends and issues will be identified with greater confidence and 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 6.87 to 8.58, with an average pH of 7.4. Results for the reporting period are shown in **Figure 14** along with historical results. 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). On two occasions, pH was recorded as being above the maximum pH limit of 8.5 (pH of 8.56 on 18 June 2015 and 8.58 on 17 December 2015). There is a very slight increasing linear trend in pH although this is not presently of concern considering the magnitude of the trend and the

treatment measures in place to control the pH of water discharged from the Site. Nonetheless, this trend should be closely monitored during future monitoring events.

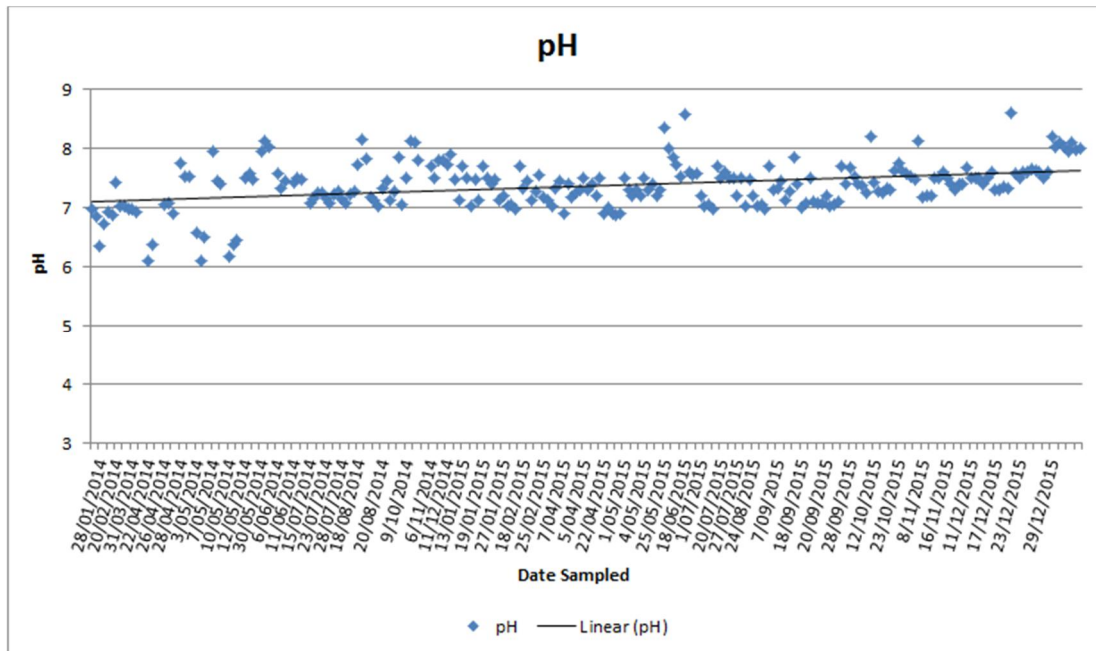


Figure 14 pH levels recorded in bund water at the Site

Total Dissolved Solids (TDS)

TDS levels in bund water during the reporting period ranged from 0 to 185 ppm, with an average of 47.8 ppm. Results for the reporting period are shown in **Figure 15** along with historical results. TDS levels in the bund water during the reporting period were quite variable. Historically TDS levels at the Site have been relatively stable between 0 -100 ppm, with the exception of occasional samples with higher levels. During the current reporting period ten samples recorded levels higher than 100 ppm. No discernible trend was identified in TDS levels recorded in bund water at the Site.

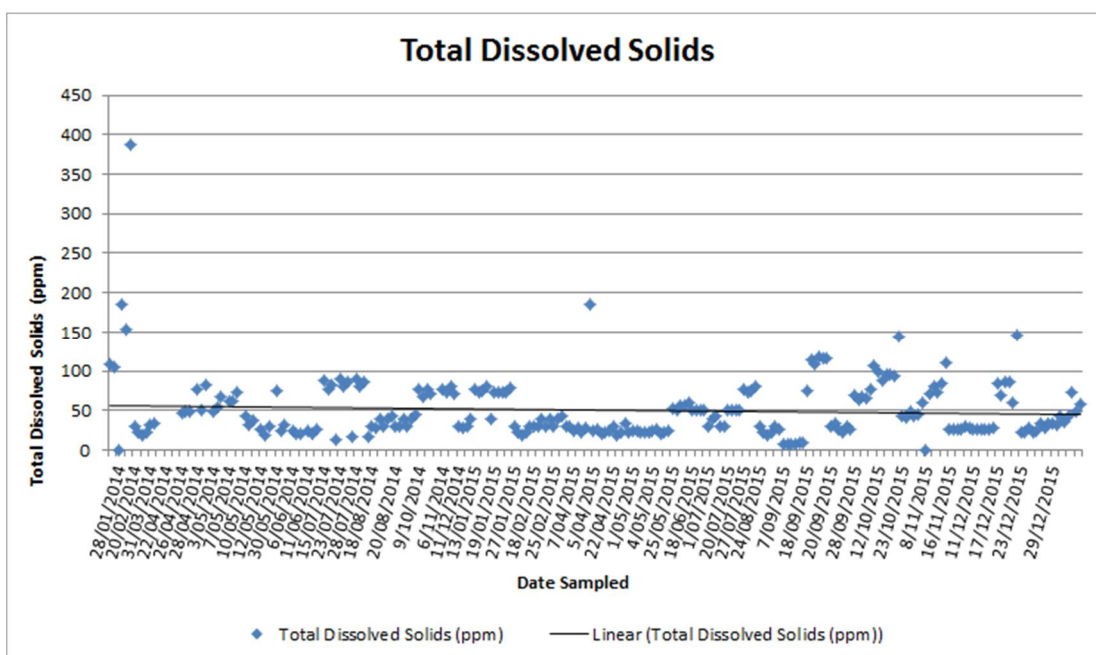


Figure 15 Total Dissolved Solids concentrations recorded in bund water at the Site

Dissolved Oxygen

Dissolved oxygen concentrations in bund water during the reporting period ranged from 6.4 to 114 mg/L, with an average concentration of 40.9 mg/L. Results for the reporting period are shown in **Figure 16** along with historical results. While dissolved oxygen concentrations were varied throughout the reporting period, an increasing linear trend was identified which can indicate increasing water quality.

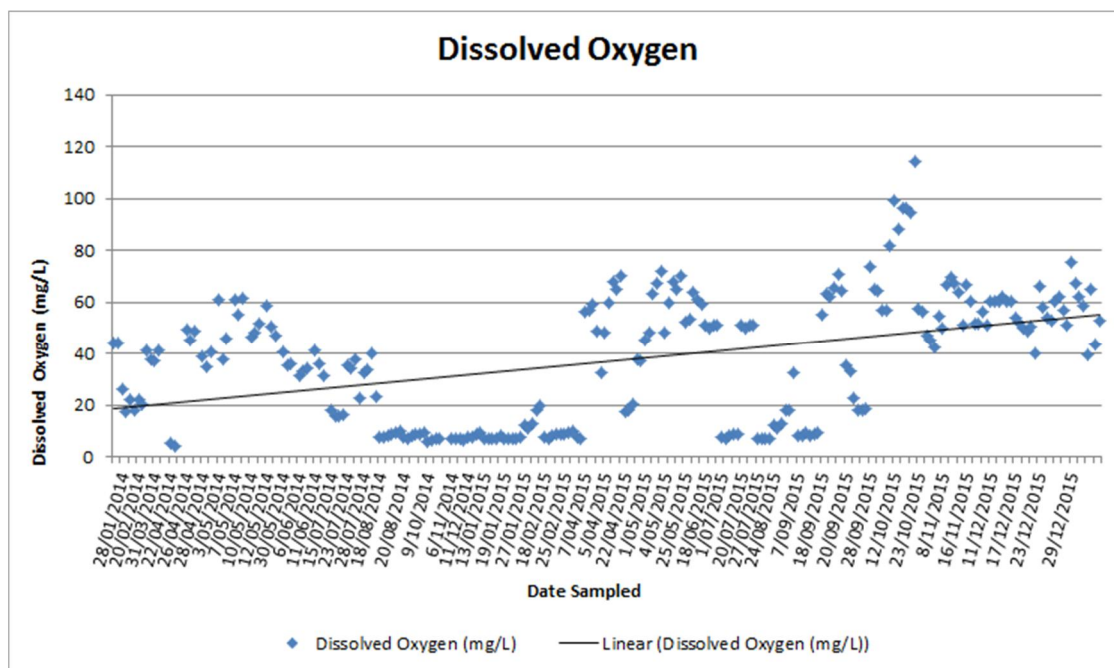


Figure 16 Dissolved oxygen levels in bund water at the Site

Conductivity

Conductivity levels in bund water during the reporting period ranged from 0.1 to 271 $\mu\text{S}/\text{cm}$, with an average conductivity of 74.4 $\mu\text{S}/\text{cm}$. Results for the reporting period are shown in **Figure 17** along with historical results. While conductivity levels varied during the reporting period, an increasing trend was identified in the historical results. This may indicate an increase in dissolved salts and other inorganic chemicals. This trend is not of great concern at present, given the small data sample size (two years) and the treatment measures in place to control the water quality parameters for water discharged from the Site. Nonetheless, this trend should be closely monitored during future monitoring events.

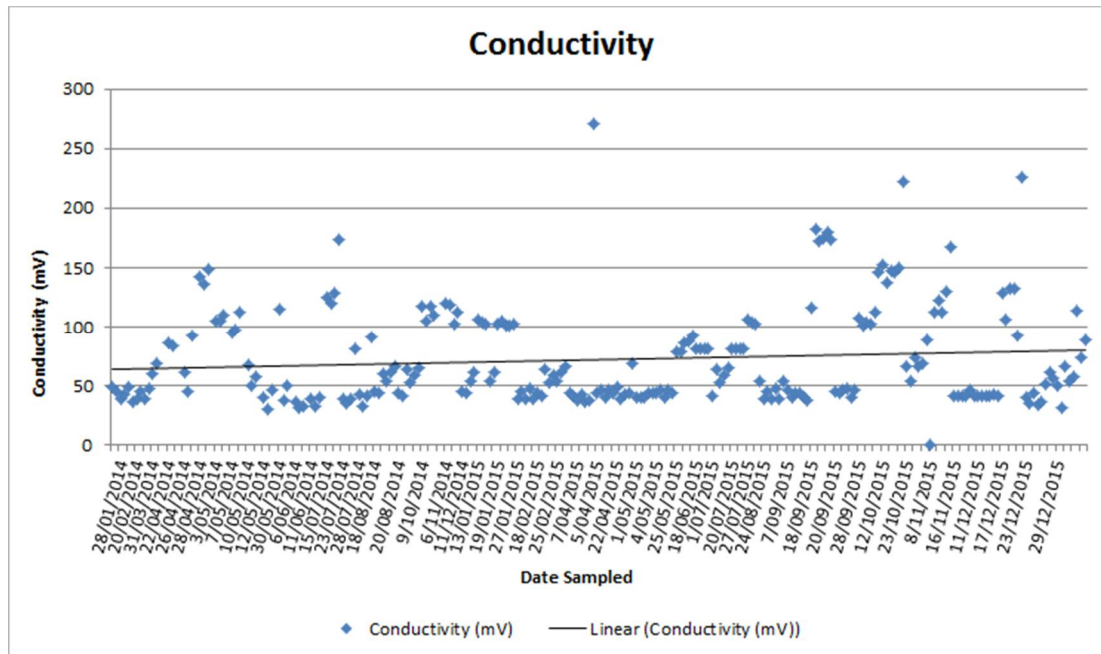


Figure 17 Conductivity levels in bund water at the Site

4.4 Summary of Stormwater Results

Stormwater management and monitoring measures implemented at the Site have been successful in preventing environmental harm in this reporting period. Sampling identified some exceedances of the EPL criteria and in these instances water was treated and retested until compliance was achieved or the water was pumped out and removed off site. These management measures ensured that all stormwater discharged from the Site was compliant with the requirements of EPL 20193. The source of exceedances is potentially from airborne material which have been blown onto the Stolthaven site, or potentially tracked in or sources from tyres of trucks moving through the site. Stolthaven has invested in a sweeper unit to manage materials on the sites driveway areas.

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.

5.0 Noise

5.1 Operational Noise

Operational noise generation is managed and monitored according to the Site's Noise Management Plan. The main noise sources at the site are summarised in **Table 11**. During operations, haulage ships dock at M4 and pump fuel into storage tanks to be blended and held on site. Haulage trucks receive the blended fuels and transport it through an access road leading to the intersection of Industrial Drive and Ingall Street. All these operations have the potential to result in noise emissions.

Table 11 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 transferring fuel (currently at M4, as such these operations fall under Condition 5.11 of the Development Consent applicable to M4 (DA-293-08-00 MOD 9, dated 29 August 2013)).

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. To the south east there are 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. The operational noise criteria that have to be met as prescribed by the EPL are shown in **Table 12**.

The SSD_6664 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 area is currently in development and is yet to be finalised. Therefore, noise quota levels have not yet been issued for the facility.

Table 12 Operational Noise Criteria

Receiver	Location	Day	Evening	Night	
		L _{Aeq} (15min)	L _{Aeq} (15min)	L _{Aeq} (15min)	LA1 (1min)
R1, R2, R3, R4, R6, R7	Mayfield	48	43	42	52
R5	Carrington	48	43	42	54
R8	Mayfield	49	48	44	54
R9	Stockton	52	51	51	61
R10	Mayfield East	45	N/A	N/A	N/A

5.2 Noise Modelling Results

Attended noise measurements were undertaken on 29 September 2015 at the closest nearby residential receiver locations. It was found that it was not possible to directly measure the impact of noise arising from operations at the Facility due to the influence from extraneous noise sources, i.e. existing industrial noise from other industrial areas unrelated to the Facility and traffic noise on Industrial Drive. The compliance assessment was therefore carried out using SoundPLAN noise modelling software, based upon on-site attended and unattended noise measurements, in accordance with the NSW EPA Industrial Noise Policy (INP). Noise emissions were assessed under worst case prevailing wind and temperature inversion conditions in two different operations scenarios on site. The results of this assessment are provided in **Table 13 - Table 16**.

Table 13 Reasonable worst case intrusiveness scenario (15 minute period) – Day Scenario

Period	Criteria, dB(A)	Day								
Assessed meteorological condition		Neutral			3 m/s source to receiver wind			Temperature Inversion (F-Class, 3°C/100 m)		
		Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance
		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations	
Receiver										
R1	48	24	29	Yes	28	34	Yes	N/A ¹	N/A ¹	N/A ¹
R2	48	25	31	Yes	29	35	Yes	N/A ¹	N/A ¹	N/A ¹
R3	48	25	31	Yes	29	35	Yes	N/A ¹	N/A ¹	N/A ¹
R4	48	30	35	Yes	35	39	Yes	N/A ¹	N/A ¹	N/A ¹
R5	48	30	34	Yes	35	38	Yes	N/A ¹	N/A ¹	N/A ¹
R6	48	31	36	Yes	35	40	Yes	N/A ¹	N/A ¹	N/A ¹
R7	48	26	32	Yes	30	36	Yes	N/A ¹	N/A ¹	N/A ¹
R8	49	15	16	Yes	20	22	Yes	N/A ¹	N/A ¹	N/A ¹
R9	52	11	14	Yes	18	20	Yes	N/A ¹	N/A ¹	N/A ¹
R10	45	30	35	Yes	34	38	Yes	N/A ¹	N/A ¹	N/A ¹

Note 1 – Assessment of temperature inversion does not apply during the day time period.

Table 14 Reasonable worst case intrusiveness scenario (15 minute period) – Evening Scenario

Period	Criteria, dB(A)	Evening								
Assessed meteorological condition		Neutral			3 m/s source to receiver wind			Temperature Inversion (F-Class, 3°C/100 m)		
		Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance
		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations	
Receiver										
R1	43	25	30	Yes	29	34	Yes	29	34	Yes
R2	43	26	32	Yes	30	36	Yes	29	35	Yes
R3	43	26	32	Yes	30	35	Yes	29	35	Yes
R4	43	31	35	Yes	36	39	Yes	35	38	Yes
R5	43	31	34	Yes	36	39	Yes	35	38	Yes
R6	43	32	37	Yes	36	40	Yes	35	39	Yes
R7	43	27	32	Yes	31	36	Yes	30	35	Yes
R8	48	17	18	Yes	22	24	Yes	22	23	Yes
R9	51	13	16	Yes	19	22	Yes	20	22	Yes
R10	N/A	31	35	N/A	35	39	N/A	34	38	N/A

Table 15 Reasonable worst case intrusiveness scenario (15 minute period) – Night Scenario

Period	Criteria, dB(A)	Night								
Assessed meteorological condition		Neutral			3 m/s source to receiver wind			Temperature Inversion (F-Class, 3°C/100 m)		
		Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)		Compliance
		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations		Worst case site operations	Worst case truck operations	
Receiver										
R1	42	25	30	Yes	29	34	Yes	29	34	Yes
R2	42	26	32	Yes	30	36	Yes	29	35	Yes
R3	42	25	32	Yes	30	35	Yes	29	35	Yes
R4	42	31	35	Yes	36	39	Yes	35	38	Yes
R5	42	31	34	Yes	36	39	Yes	35	38	Yes
R6	42	32	37	Yes	36	40	Yes	35	39	Yes
R7	42	27	32	Yes	31	36	Yes	30	35	Yes
R8	44	17	18	Yes	22	24	Yes	22	23	Yes
R9	51	13	16	Yes	19	22	Yes	20	22	Yes
R10	N/A	31	35	N/A	35	39	N/A	34	38	N/A

Table 16 Sleep disturbance assessment

Receiver	Criteria dB(A)	Neutral		3 m/s source to receiver wind		Temperature inversion (F-Class, 3°C/100 m)	
		Predicted noise level, L _{Aeq} (15 min), dB(A)	Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)	Compliance	Predicted noise level, L _{Aeq} (15 min), dB(A)	Compliance
R1	52	38	Yes	42	Yes	41	Yes
R2	52	44	Yes	47	Yes	46	Yes
R3	52	44	Yes	48	Yes	47	Yes
R4	52	45	Yes	48	Yes	47	Yes
R5	54	42	Yes	45	Yes	45	Yes
R6	52	46	Yes	49	Yes	48	Yes
R7	52	43	Yes	46	Yes	45	Yes
R8	54	25	Yes	31	Yes	31	Yes
R9	61	22	Yes	28	Yes	28	Yes

5.3 Analysis of Results

Compliance has been 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_6664 development application to increase throughput to 1010 ML per year. A Noise and Vibration Assessment was also prepared for the subsequent Modification application to increase annual throughput to 1,300ML. 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.

Noise limits set out in EPL 20193 were amended during the reporting period, and as such a comparison to previous years' compliance assessment is not presented. Trends in noise monitoring results may become apparent in future years.

6.0 Fuel Storage and Transport

6.1 Fuel Storage

Approximately 1,211 ML was received on site and 1,203 ML was transported off site during the reporting period. A breakdown of fuel stored, received, and dispatched is provided in **Table 17**. On balance, 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 is noted that there is a discrepancy of 628,906 L (or approximately 0.63 ML) in the balance between these volumes. This variation is approximately 0.048% of the approved throughput capacity of the Site, which is below the Site measurement tolerance of 0.5%. 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; and
- Gantry meters are calibrated on a 6 monthly schedule.

Table 17 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)	31,968,557	1,181,856,406	1,123,462,591	39,861,750
Biodiesel (L)	3,735,540	29,734,554	79,818,130	4,558,141
Additive (L)	2,810	22,100	1,833	22,724
Slops (L)	13,461	-	216,900	20,265
Total (L)	35,720,368	1,211,613,060	1,203,499,454	44,462,880

While the current annual throughput limit approved under Condition A1.4 of the EPL is 1,300 ML, it is noted that there were two breaches of Condition A1.4 during the reporting period. The annual throughput approved under SSD_6664 was increased from 500 ML to 1,010 ML on 16 April 2015, and then again increased from 1,010 ML to 1,300 ML on 28 September 2015. However the annual throughput approved under the EPL was not likewise amended until 14 May 2015 and 2 October 2015 respectively. Therefore exceedances of the throughput limit set out in Condition A1.4 of the EPL occurred between 1 April 2015 and 13 May 2015 (inclusive), and between 17 September 2015 and 1 October 2015 (inclusive). The EPA was advised of the exceedances and penalty notices were issued accordingly. These exceedances are further discussed in **Section 9.0**.

6.2 Truck Movements

Over the reporting period there were a total of 52,428 truck movements at an average of approximately 3,745 each month. This equates to approximately 123 truck movements per day. A breakdown of hourly truck movements is provided at **Appendix B**.

A Traffic Impact Assessment (TIA) was conducted as part of the EIS for the SSD_6664 development application to increase throughput to 1010 ML per year, and as part of the subsequent modification to increase throughput to 1,300ML 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.

Monthly traffic movements for the reporting period compared to those of the previous reporting years is provided in **Figure 18**. The greater number of truck movements during the current reporting period reflects the increased throughput approved at the Site since commencement of operations.

6.2.1 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; and
- Total Mayfield Concept Plan Truck Movements per hour – 95.

During the busiest month of operations throughout the review period (July 2015), movements from Stolthaven averaged up to 145 movements per day which is the equivalent of approximately 6 per hour. This is well within the Concept Plan's initial limits listed above.

The only other major operation within the Concept Plan area is Mayfield Berth 4. While exact truck movements for M4 are not available it is considered highly unlikely that M4 traffic generation would be greater than Stolthaven and therefore total truck numbers would be within the Concept Plan limits.

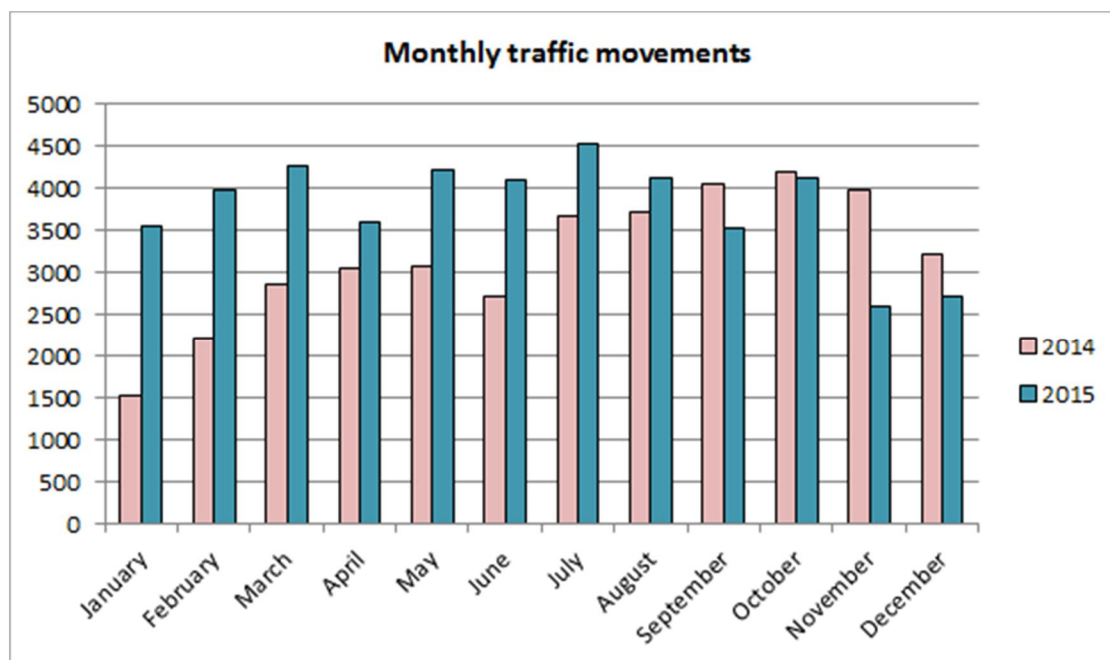


Figure 18 Comparison of monthly truck movements

7.0 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 18**. Waste is discharged from the site once it has been treated to an acceptable quality or is disposed of by an appropriately licence waste collector. Waste removed from the Site in the current reporting period is summarised in **Table 18**.

Table 18 Waste Removal Totals

Tank	Date	Volume (L)
Septic Tank (Effluent)	3/11/2014	1,800
	11/11/2014	2,700
	18/11/2014	2,800
	25/11/2014	2,200
	4/12/2014	2,900
	11/12/2014	4,000
	18/12/2014	3,300
	24/12/2014	4,000
	30/12/2014	3,800
	5/01/2015	4,000
	8/01/2015	4,000
	12/01/2015	9,000
	15/01/2015	1,000
	29/01/2015	2,500
	6/02/2015	6,800
	12/02/2015	2,800
	19/02/2015	3,300
	12/03/2015	2,000
	19/03/2015	2,500
	26/03/2015	2,500
	2/04/2015	2,300
	10/04/2015	2,800
	16/04/2015	1,500
	24/04/2015	2,500
	30/04/2015	2,000
	7/05/2015	2,200
	14/05/2015	2,000
	21/05/2015	2,500
	28/05/2015	2,100
	5/06/2015	4,000

Tank	Date	Volume (L)
	11/06/2015	2,500
	19/06/2015	3,300
	25/06/2015	3,000
	2/07/2015	3,300
	9/07/2015	3,200
	16/07/2015	3,000
	24/07/2015	3,300
	30/07/2015	3,000
	6/08/2015	2,000
	14/08/2015	3,000
	19/08/2015	2,000
	27/08/2015	2,000
	3/09/2015	3,300
	10/09/2015	3,000
	17/09/2015	3,000
	1/10/2015	2,000
	8/10/2015	3,000
	15/10/2015	2,500
	29/10/2015	2,500
	5/11/2015	2,500
	12/11/2015	2,000
	19/11/2015	3,500
	26/11/2015	2,800
	3/12/2015	2,000
	11/12/2015	3,400
	17/12/2015	2,700
	23/12/2015	2,700
	30/12/2015	1,300
	TOTAL (Septic Tank)	167,600
Slops Tank*	18/11/2014	15,400
	17/12/2014	9,000
	17/12/2014	9,000
	17/12/2014	9,200
	14/01/2015	8,600
	15/01/2015	1,000
	6/03/2015	8,000

Tank	Date	Volume (L)
	6/03/2015	8,000
	23/03/2015	8,000
	1/04/2015	12,000
	13/04/2015	13,000
	7/05/2015	8,500
	19/05/2015	16,400
	19/06/2015	15,000
	9/07/2015	10,000
	15/07/2015	17,100
	12/08/2015	18,100
	7/09/2015	20,300
	8/10/2015	18,500
	21/10/2015	20,000
	3/11/2015	17,000
	1/12/2015	17,400
	TOTAL (Slops)	279,500

*slops consists of a mix of diesel, motor spirit and water

7.1 Spills and Site Contamination

Records of reportable spills and site contamination are described in the incident register provided in **Appendix C**. 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.

All incidents related to potential spills and site contamination were minor and effectively managed on Site. There are no ongoing issues related to any incidents that occurred during the reporting period.

During the reporting period there was one incident on 10 August 2015 in which a discharge hose was damaged. While a ship was in the process of discharging diesel, the bow of the ship drifted away from the berth, causing the discharge hose to spread across the water. As the vessel returned to the berth the discharge hose sagged and was crushed between the berth fender and the ship. There was no breach of the hose and no diesel was lost to ground or water. Relevant authorities were notified, including the EPA and the PON, and incident reports were issued to the EPA and Department of Planning in accordance with the timeframes set out in Schedule 4, Condition 6 and 7 of the SSD_6664 consent and Condition R2 of EPL 20193.

Discussion of corrective actions recommended as a result of incident investigations are provided in **Section 9.0**.

8.0 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.

9.0 Compliance

Non-compliances and reportable incidents identified during the review are detailed in **Table 19**.

Table 19 Non-Compliances and Reportable Incidents

Condition No / Reference	Details of Non-Compliance / Incident	Corrective Action
Non-Compliances		
EPL 20193 Condition M5	<i>Incomplete weather monitoring.</i> The meteorological station at Port of Newcastle M4 berth did not provide the capability to monitor temperature at 2 metres. This was applicable during 18 November 2014 – 29 October 2015.	As at 30 October 2015, Stolthaven installed a meteorological station within the Stolthaven Mayfield Terminal with the capability to monitor all meteorological parameters noted under condition M5 of EPL 20193.
EPL 20193 Condition A1.4	<i>Exceedance of Annual Throughput Limit.</i> Between 1 April 2015 and 13 May 2015 (inclusive) the licensed throughput of 500 ML was exceeded. The exceedance occurred whilst Stolthaven was in the process of modifying the throughput limits set out in the Project Approval and EPL.	The EPA issued a penalty notice for this non-compliance and amended the EPL to require monthly provision of information and records in respect of the throughput of petroleum products at the Site.
EPL 20193 Condition A1.4	<i>Exceedance of Annual Throughput Limit.</i> Between 17 September 2015 and 1 October 2015 (inclusive) the licensed throughput of 1,010 ML was exceeded. The exceedance occurred whilst Stolthaven was in the process of modifying the throughput limits set out in the Project Approval and EPL.	The EPA issued a penalty notice for this non-compliance and amended the EPL to require monthly provision of information and records in respect of the throughput of petroleum products at the Site.
Reportable Incidents		
SSD_6664 Schedule 4, Condition 6 and 7 and EPL 20193 Condition R2	An incident occurred on 10 August 2015 in which a discharge hose was damaged. While a ship was in the process of discharging diesel, the bow of the ship drifted away from the berth, causing the discharge hose to spread across the water. As the vessel returned to the berth the discharge hose sagged and was crushed between the berth fender and the ship. There was no breach of the hose and no diesel was lost to ground or water. Relevant authorities, including the EPA and the PON, were notified within required timeframes. An investigation was undertaken and incident reports were issued to the EPA and Department of Planning in accordance with the timeframes set out in the approval conditions.	It is believed that the cause of the incident is surging / suction from passing vessels. Stolthaven is awaiting further advice or guidance to be issued from the PON or Port Authority regarding shipping movements (speed/direction/location to M4 berth). The following recommendations have been implemented to increase awareness and to avoid further incidents of this nature: <ol style="list-style-type: none"> 1) Increase the Wharf attendant checks from 6 hours to 4 hourly. This will record the checks on a more frequent basis resulting in a heightened awareness. 2) Print out Port Movements for the Port company website, prior to discharge for Wharf Attendant awareness. The Wharf Attendant will be expected to closely monitor the movements past Mayfield 4 on every occasion alerting all parties earlier if there are any issues. 3) Review the possibility of moving the hoses and ship connection point 5 meters S/E. The fenders at Mayfield 4 at approx. 10 meters apart.

Condition No / Reference	Details of Non-Compliance / Incident	Corrective Action
		<p>Moving the connection point 5 meters to the S/E will put the connection point between the fenders. If the incident was to occur again it would be more likely the hoses would not be damaged by the fender and fall in the cavity between Ship and berth.</p> <p>4) Consider Marine Loading Arm (MLAs) on the project berth "Mayfield 7 with quick release couplings.</p>

9.1 Pipeline Integrity

An Annual Pipeline Pressure Test was conducted at the Stolthaven Terminal on the wharf pipeline on the 7 November 2015 by Hancock & Owen Services. The test confirmed the integrity of the pipeline. A copy of the test report is included in **Appendix D**.

10.0 Complaints

No complaints were received by Stolthaven during the reporting period.

11.0 Conclusion and Recommendations

The data collected and reviewed for the reporting period indicates that the Site's impact on the surrounding environment is of an acceptable level and in accordance with the SSD_6664 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. However, the dataset available is still relatively small given that the Site has only been operational since November 2013. 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. From the limited data available for this reporting period, no significant trends were identified that would necessitate environmental management actions from Stolthaven for the Site.

Data from the groundwater monitoring program could not identify trends in TRH and BTEX as concentrations were largely non-calculable given the small dataset available for analysis and the high proportion of Non-Detect values in the data (caused by data points with results below LOR concentrations). Some preliminary trends were identified for pH levels, including a decreasing trend at MW01, MW02, and MW04 and an increasing trend at MW03. Results of groundwater monitoring will continue to be analysed quarterly to assess the development of these trends.

Stormwater management and monitoring measures implemented at the Site have been successful in preventing environmental harm 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 complied with the predictions made in the EIS for the SSD_6664 application to increase throughput to 1,010 ML and subsequent SEE for modification No 1.

Appendix A

Stormwater Monitoring

Appendix A Stormwater Monitoring

First Flush Results (Max Capacity 38,500 Litres)

Samples Collected:	Samples Tested:	BOD (mg/L)	Dissolved Oxygen (mg/L)	Oil and Grease (mg/L)	pH	Total Suspended Solids (TSS)	Volume (L)	Comments
24/11/2014	24/11/2014	17.0	1.31	< 2	6.90	58	15,000 - 40,000	
1/12/2014	1/12/2014	-	7.55	-	-	3	15,000 - 40,000	Retest for TSS and DO (Conducted by ALS) - EPA informed, further retest must be conducted across entire criteria, not individual failed results.
9/12/2014	9/12/2014	3.0	6.80	< 2	7.20	11	15,000 - 40,000	
13/01/2015	19/01/2015	6.0	6.84	< 2	7.30	2	20,000	
28/01/2015	28/01/2015	14.0	8.23	< 2	8.00	19	15,000 - 40,000	
28/01/2015	28/01/2015	3.0	8.60	< 2	7.10	9	15,000 - 40,000	
18/02/2015	18/02/2015	< 2	3.44	< 2	6.90	19	15,000 - 40,000	
2/03/2015	2/03/2015	2.0	5.08	< 2	7.40	23	15,000 - 40,000	
10/04/2015	10/04/2015	3.0	6.20	< 2	7.10	20	38,500	
1/05/2015	1/05/2015	< 2	10.60	7	7.32	5	15,000 - 40,000	
12/06/2015	12/06/2015	5.0	7.04	16	7.90	87	12,000	EPA notified (Ref No. C08247-2015) - Removed by Trade Waste
23/06/2015	23/06/2015	< 2	8.91	< 2	7.30	8	15,000	.
1/07/2015	7/07/2015	< 2	8.55	14	7.70	32	35,000	ALS contacted to retest TSS and/or O/G (8th July 2015) - Removed by Trade Waste
20/07/2015	27/07/2015	2.0	8.99	< 2	7.60	53	35,000	Failed TSS (max 30mg/L), ALS contacted to retest TSS (28th July 2015)
27/07/2015	3/08/2015	5.0	7.48	3	7.60	28	35,000	Retest PASSED - An increased settling time could be a contributing factor to the decreased TSS result.
24/08/2015	24/08/2015	4.0	8.21	< 2	8.40	28	35,000	
21/09/2015	21/09/2015	N/A	7.64	< 2	7.40	3	35,000	On the 27 August 2015 BOD was removed from the licence criteria by the EPA.
12/10/2015	14/10/2015	N/A	5.01	< 2	6.80	51	35,000	
15/10/2015	20/10/2015	N/A	3.37	2	7.00	4	35,000	Retest sample, due to non-compliant result on the 14th October 2015
4/11/2015	6/11/2015	N/A	7.81	< 2	7.30	34	35,000	Failed TSS, resampled on the 7th November 2015 and retested for all criteria (shown below)
7/11/2015	11/11/2015	N/A	6.73	< 2	7.30	12	35,000	Retest sample, due to non-compliant result on the 6th November 2015
16/11/2015	16/11/2015	N/A	6.09	3	7.30	1		

BUND WATER RESULTS

	Samples Collected:	Samples Tested:	Location	Temp (°C)	pH	Total Dissolved Solids (ppm)	Dissolved Oxygen (mg/L)	Conductivity (mV)	Appearance	Volume (L) Approx.	Comments
22	11/12/2014	11/12/2014	Bund 1	17.0	7.72	29.2	7.5	44.9	Clear	10,000.00	
			Bund 2	16.8	7.90	28.1	7.4	43.6	Clear	10,000.00	
			Bund 5	17.1	7.47	31	8.6	53.8	Clear	10,000.00	
			Bund 6	17.3	7.12	39.9	9.5	61.2	Clear	10,000.00	
23	13/01/2015	13/01/2015	Bund 1	23.2	7.70	76.8	7.0	105.6	Clear	10,000.00	
			Bund 2	23.5	7.50	72.3	7.2	103.2	Clear	10,000.00	
			Bund 3	23.2	7.01	74.5	6.8	101.8	Clear	10,000.00	
			Bund 5	23.8	7.47	80	7.2	53.8	Clear	10,000.00	
			Bund 6	20.8	7.12	39.9	8.3	61.2	Clear	10,000.00	
24	19/01/2015	19/01/2015	Bund 1	23.0	7.70	72.4	7.0	103	Clear	20,000.00	
			Bund 2	23.2	7.50	73	7.0	104.4	Clear	20,000.00	
			Bund 3	23.2	7.40	74	6.8	100.9	Clear	20,000.00	
			Bund 5	23.6	7.47	74	7.2	101.2	Clear	20,000.00	
			Bund 6	23.1	7.13	78	7.8	102.1	Clear	20,000.00	
25	27/01/2015	27/01/2015	Bund 1	20.1	7.20	29.3	12.1	38.2	Clear	40,000.00	
			Bund 2	20.2	7.02	22	11.3	45.2	Clear	40,000.00	
			Bund 3	20.0	7.05	18.2	13.0	39.1	Clear	40,000.00	
			Bund 5	21.0	6.98	21.8	17.9	47.2	Clear	40,000.00	
			Bund 6	20.2	7.70	31	19.9	38.5	Clear	40,000.00	
26	18/02/2015	18/02/2015	Bund 1	25.6	7.31	29.2	7.4	43.2	Clear	15,000.00	
			Bund 2	24.7	7.45	29.4	7.0	41	Clear	15,000.00	
			Bund 3	24.1	7.11	38.7	8.3	63.2	Clear	15,000.00	
			Bund 5	24.0	7.26	30.2	8.5	52.8	Clear	15,000.00	
			Bund 6	24.7	7.55	39.8	8.9	58.9	Clear	15,000.00	
27	25/02/2015	25/02/2015	Bund 1	23.0	7.17	31	8.6	53.8	Clear	5,000.00	
			Bund 2	23.2	7.12	39.9	9.5	61.2	Clear	5,000.00	

			Bund 3	23.2	7.01	43	9.9	66.2	Clear	5,000.00	
			Bund 5	23.6	7.31	29.2	7.4	43.2	Clear	5,000.00	
			Bund 6	23.1	7.45	29.4	7.0	41	Clear	5,000.00	
28	7/04/2015	7/04/2015	Bund 2	22.8	6.89	24	56.1	37	Clear	40,000.00	
			Bund 3	22.6	7.39	28.2	57.1	43	Clear	40,000.00	
			Bund 5	22.5	7.17	23.3	59.0	36.4	Clear	40,000.00	
			Bund 6	22.2	7.24	28.1	48.7	37.8	Clear	40,000.00	
			Bund 7	22.4	7.30	185	32.6	271	Clear	40,000.00	
29	4/05/2015	4/05/2015	Bund 1	21.0	7.50	25.1	48.0	44	Clear	40,000.00	
			Bund 2	21.1	7.30	25.6	60.0	46	Clear	40,000.00	
			Bund 3	21.5	7.40	21.2	68.0	40	Clear	40,000.00	
			Bund 5	21.2	7.20	23.2	65.0	46	Clear	40,000.00	
			Bund 6	21.1	7.50	24	70.0	44	Clear	40,000.00	
30	22/04/2015	22/04/2015	Bund 1	20.1	6.89	29.3	17.3	48.3	Clear	20,000.00	
			Bund 2	19.8	7.00	18.2	18.0	39.1	Clear	20,000.00	
			Bund 3	17.2	6.90	21.8	20.3	42.1	Clear	20,000.00	
			Bund 5	18.3	6.87	33.8	37.9	43.2	Clear	20,000.00	
			Bund 6	18.9	6.90	22	37.1	68.8	Clear	20,000.00	
31	1/05/2015	1/05/2015	Bund 1	21.0	7.50	24	45.0	40	Clear	15,000.00	
			Bund 2	21.5	7.30	25.3	48.0	40	Clear	15,000.00	
			Bund 3	21.0	7.20	21.83	63.0	40	Clear	15,000.00	
			Bund 5	21.1	7.30	22.2	67.1	44	Clear	15,000.00	
			Bund 6	21.1	7.20	23.2	72.0	44	Clear	15,000.00	
32	4/05/2015	4/05/2015	Bund 1	21.0	7.50	25.1	48.0	44	Clear	25,000.00	
			Bund 2	21.1	7.30	25.6	60.0	46	Clear	25,000.00	
			Bund 3	21.5	7.40	21.2	68.0	40	Clear	25,000.00	
			Bund 5	21.2	7.20	23.2	65.0	46	Clear	25,000.00	
			Bund 6	21.1	7.30	24	70.0	44	Clear	25,000.00	
33	25/05/2015	25/05/2015	Bund 1	17.5	8.33	52.4	52.4	79	Clear	30,000.00	
			Bund 2	18.4	8.00	51	53.2	78.5	Clear	30,000.00	
			Bund 3	17.7	7.84	55.7	64.1	85.6	Clear	30,000.00	

			Bund 5	17.1	7.73	56.3	60.8	86.9	Clear	30,000.00	
			Bund 6	17.0	7.52	60.5	59.2	92.8	Clear	30,000.00	
34	18/06/2015	18/06/2015	Bund 1	17.4	8.56	50.7	51.3	81.2	Clear	10,000.00	
			Bund 2	17.3	7.60	50.6	50.2	81	Clear	10,000.00	
			Bund 3	17.5	7.55	51	51.2	81.4	Clear	10,000.00	
			Bund 5	17.4	7.57	50.8	51.0	81	Clear	10,000.00	
35	1/07/2015	1/07/2015	Bund 1	23.0	7.20	31	7.4	41	Clear	35,000.00	
			Bund 2	23.2	7.02	39.9	7.0	63.2	Clear	35,000.00	
			Bund 3	23.2	7.05	43	8.3	52.8	Clear	35,000.00	
			Bund 5	23.6	6.98	29.2	8.5	58.9	Clear	35,000.00	
			Bund 6	23.1	7.70	29.4	8.9	64.4	Clear	35,000.00	
36	20/07/2015	20/07/2015	Bund 1	17.0	7.50	50.1	51.2	81	Clear	20,000.00	
			Bund 2	17.2	7.60	51	50.2	81	Clear	20,000.00	
			Bund 3	17.3	7.50	51	51.2	81.2	Clear	20,000.00	
			Bund 5	17.5	7.50	50.2	51.0	81.4	Clear	20,000.00	
37	27/07/2015	27/07/2015	Bund 1	22.8	7.20	76.8	7.0	105.6	Clear	30,000.00	
			Bund 2	22.6	7.50	72.3	7.2	103.2	Clear	30,000.00	
			Bund 3	22.5	7.01	74.5	6.8	101.8	Clear	30,000.00	
			Bund 5	22.0	7.47	80	7.2	53.85	Clear	30,000.00	
38	24/08/2015	24/08/2015	Bund 1	16.8	7.20	29.3	12.1	38.2	Clear	40,000.00	
			Bund 2	16.8	7.02	22	11.3	45.2	Clear	40,000.00	
			Bund 3	16.8	7.05	18.2	13.0	39.1	Clear	40,000.00	
			Bund 5	17.0	6.98	21.8	17.9	47.2	Clear	40,000.00	
			Bund 6	17.2	7.70	31	17.9	38.5	Clear	40,000.00	
			Bund 7	17.2	7.30	26	32.6	53.3	Clear	40,000.00	
39	7/09/2015	7/09/2015	Bund 1	17.1	7.31	7.4	8.4	46	Clear	25,000.00	
			Bund 2	17.2	7.45	7	8.0	40	Clear	25,000.00	
			Bund 3	16.9	7.11	8.3	9.3	44	Clear	25,000.00	
			Bund 5	17.0	7.26	8.5	8.2	44	Clear	25,000.00	
			Bund 6	17.1	7.83	8.9	9.0	40	Clear	25,000.00	
			Bund 7	17.2	7.40	9.1	9.2	38	Clear	25,000.00	

40	18/09/2015	18/09/2015	Bund 1	21.4	7.00	74.2	55.0	115.6	Clear	30,000.00	
			Bund 2	21.2	7.06	113.8	63.1	182.8	Clear	30,000.00	
			Bund 3	22.0	7.50	109.5	62.2	172.1	Clear	30,000.00	
			Bund 5	21.8	7.09	117.7	65.3	174.5	Clear	30,000.00	
			Bund 6	21.5	7.07	116.5	70.8	179.5	Clear	30,000.00	
			Bund 7	22.3	7.08	115.3	64.2	174.1	Clear	30,000.00	
41	20/09/2015	20/09/2015	Bund 1	17.1	7.20	30	35.3	45.1	Clear	40,000.00	
			Bund 2	17.3	7.01	33.2	33.1	44.2	Clear	40,000.00	
			Bund 3	17.2	7.05	27	22.8	46	Clear	40,000.00	
			Bund 5	17.0	7.10	21.8	17.8	47.1	Clear	40,000.00	
			Bund 6	17.1	7.70	29.2	17.9	39.8	Clear	40,000.00	
			Bund 7	17.2	7.40	27.2	18.4	46.5	Clear	40,000.00	
42	28/09/2015	28/09/2015	Bund 1	19.4	7.67	69	73.4	107	Clear	25,000.00	
			Bund 2	18.2	7.53	64.2	64.9	100.8	Clear	25,000.00	
			Bund 3	17.6	7.39	67.5	64.4	104	Clear	25,000.00	
			Bund 5	17.7	7.36	66.4	57.1	101.8	Clear	25,000.00	
			Bund 6	18.7	7.25	76.4	56.9	112.7	Clear	25,000.00	
			Bund 7	17.1	8.18	107.1	81.6	146.2	Clear	25,000.00	
43	12/10/2015	12/10/2015	Bund 1	23.3	7.41	99.3	99.3	152.1	Slightly Cloudy	1,000.00	Samples taken after 'blasting off tanks NN8 & 9
			Bund 2	23.0	7.26	88.1	88.1	137.7	Slightly Cloudy	1,000.00	
			Bund 3	22.9	7.24	96.2	96.2	147.1	Slightly Cloudy	1,000.00	
			Bund 5	22.5	7.32	96.5	96.5	145.8	Slightly Cloudy	1,000.00	
			Bund 6	22.4	7.29	94.5	94.5	149.8	Slightly Cloudy	1,000.00	
			Bund 7	23.0	7.63	144.3	114.3	222.1	Slightly Cloudy	1,000.00	
44	23/10/2015	23/10/2015	Bund 1	22.4	7.74	42.9	57.3	66.2	Clear	15,000.00	
			Bund 2	22.6	7.62	41	56.0	54.1	Clear	15,000.00	
			Bund 3	22.7	7.58	48.4	47.1	73.7	Clear	20,000.00	
			Bund 5	22.5	7.52	42.7	45.5	66.6	Clear	20,000.00	
			Bund 6	22.4	7.46	45.4	42.4	68.4	Clear	10,000.00	
			Bund 7	22.9	8.11	59.7	54.3	89.3	Clear	10,000.00	
45	8/11/2015	8-Nov	Bund 1	23.3	7.17	0	50.2	0.1	Clear	40,000.00	

[illegible]

Appendix B

Hourly Truck Movements

Appendix B Hourly Truck Movements

REPORTING PERIOD: NOVEMBER 2014

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	24	31	25	26	25	13	26	32	29	27	22	15
Bay 2	8	18	26	28	17	14	14	24	27	25	21	15
Bay 3	24	18	21	20	20	25	25	26	27	27	35	24
Bay 4	22	19	9	13	19	25	24	29	28	19	30	24
Total	78	86	81	87	81	77	89	111	111	98	108	78
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	32	31	24	23	15	17	30	23	15	10	5
Bay 2	12	28	28	16	19	13	15	19	12	8	6	1
Bay 3	28	36	25	27	23	23	23	13	20	20	19	6
Bay 4	22	24	15	20	24	21	18	11	18	19	20	8
Total	84	120	99	87	89	72	73	73	73	62	55	20

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
01/11/14	0	1	2	4	3	3	1	5	5	3	3	1
02/11/14	0	2	1	1	1	1	1	3	6	1	2	0
03/11/14	5	3	4	3	2	0	4	8	5	2	3	3
04/11/14	5	4	1	2	3	3	2	1	7	4	8	5
05/11/14	3	3	2	3	4	4	5	4	4	2	6	3
06/11/14	5	3	1	1	2	5	4	3	4	3	5	3
07/11/14	1	3	1	3	4	2	5	1	7	3	3	2
08/11/14	0	1	5	2	1	2	3	3	0	5	3	3
09/11/14	0	2	2	4	2	1	2	3	4	2	2	0
10/11/14	2	2	6	5	4	1	3	2	2	2	7	5
11/11/14	5	4	2	4	6	3	4	2	4	5	2	3
12/11/14	4	3	2	4	1	5	3	7	6	6	1	4
13/11/14	6	4	6	4	2	3	1	4	3	6	2	2
14/11/14	2	3	3	6	3	2	3	4	3	5	7	6
15/11/14	2	1	5	4	1	3	1	1	3	4	1	1
16/11/14	1	4	1	1	0	4	1	3	4	2	1	3
17/11/14	3	5	4	3	2	1	6	3	2	6	3	2
18/11/14	0	2	5	1	5	4	1	5	4	3	5	3
19/11/14	2	4	4	3	2	2	1	5	6	4	3	3
20/11/14	0	5	4	3	4	1	3	3	5	1	6	0
21/11/14	0	3	3	0	4	3	2	4	2	7	4	4
22/11/14	3	1	3	3	2	2	2	4	2	3	2	1
23/11/14	1	6	1	2	2	1	4	4	1	1	1	1
24/11/14	6	3	3	3	2	4	3	6	2	2	5	6
25/11/14	5	2	2	3	5	3	4	5	2	4	2	3
26/11/14	4	2	1	4	2	3	7	3	6	3	4	3
27/11/14	2	3	2	4	5	4	3	6	2	1	5	1
28/11/14	6	1	4	3	4	3	3	2	7	3	5	5
29/11/14	4	4	1	3	2	3	3	4	1	5	3	1
30/11/14	1	2	0	1	1	1	4	3	2	0	4	1
01/12/14	0	0	0	0	0	0	0	0	0	0	0	0
Total	78	86	81	87	81	77	89	111	111	98	108	78
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
01/11/14	4	3	2	0	2	2	1	0	3	2	1	1
02/11/14	0	2	4	1	2	1	1	3	0	2	1	0
03/11/14	1	4	1	4	6	1	2	2	3	1	4	1
04/11/14	2	5	3	3	5	3	6	3	3	3	3	0
05/11/14	6	3	4	5	4	4	1	4	1	3	4	0
06/11/14	3	5	3	3	3	4	2	1	3	2	3	2
07/11/14	5	1	3	6	5	2	4	4	3	3	3	0
08/11/14	5	3	3	3	2	0	2	2	3	2	1	0
09/11/14	2	7	0	2	1	0	3	2	2	2	1	1
10/11/14	2	5	3	4	4	4	4	4	2	7	1	1
11/11/14	3	4	4	2	2	3	5	5	2	2	2	0
12/11/14	3	7	2	2	5	3	3	2	3	0	1	1
13/11/14	3	5	7	5	4	2	1	3	3	3	2	2
14/11/14	3	3	6	5	5	2	2	2	2	2	2	1
15/11/14	3	2	5	2	2	0	1	3	3	2	0	0
16/11/14	1	4	4	1	0	1	4	2	1	2	0	1
17/11/14	1	5	3	2	3	3	1	1	4	3	2	1
18/11/14	1	6	3	5	2	3	2	2	4	4	3	0
19/11/14	4	5	6	2	5	2	1	6	5	4	1	0
20/11/14	4	6	5	3	3	4	2	1	3	1	1	1
21/11/14	3	5	1	2	1	3	3	3	3	0	2	1
22/11/14	2	4	1	2	0	1	3	2	1	0	2	0
23/11/14	2	4	4	1	0	2	4	2	1	1	1	0
24/11/14	5	4	1	1	4	6	3	2	3	2	3	4
25/11/14	2	1	2	3	6	4	4	3	0	2	2	1
26/11/14	2	4	5	6	4	3	1	3	1	2	4	0
27/11/14	4	5	4	6	4	2	2	3	2	0	1	1
28/11/14	1	1	4	5	4	3	1	0	6	2	0	0
29/11/14	2	5	4	1	0	1	1	3	3	1	2	0
30/11/14	5	2	2	0	1	3	3	2	0	2	2	0
01/12/14	0	0	0	0	0	0	0	0	0	0	0	0
Total	84	120	99	87	89	72	73	73	73	62	55	20

REPORTING PERIOD: DECEMBER 2014

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	18	26	27	25	26	29	20	21	28	26	18	24
Bay 2	13	18	23	23	21	17	10	16	22	25	19	20
Bay 3	16	17	9	16	16	23	22	20	16	21	27	22
Bay 4	11	10	9	8	14	20	20	17	16	18	12	14
Total	58	71	68	72	77	89	72	74	82	90	76	80
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	28	31	29	26	23	20	19	22	14	18	3
Bay 2	13	22	27	23	14	8	14	13	6	7	12	1
Bay 3	19	22	13	17	21	15	18	14	7	10	13	5
Bay 4	15	12	16	8	11	9	17	8	9	4	6	2
Total	66	84	87	77	72	55	69	54	44	35	49	11

Traffic Movement Assessment Data

	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
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
01/12/14	3	4	1	2	4	5	4	3	3	2	1	4
02/12/14	3	3	2	3	4	2	3	5	3	6	1	0
03/12/14	4	4	4	5	4	5	4	3	4	5	1	2
04/12/14	0	2	3	0	3	4	4	2	4	5	3	4
05/12/14	3	2	2	3	2	3	1	3	3	1	3	2
06/12/14	1	1	2	1	2	2	3	3	2	5	3	2
07/12/14	0	0	2	0	0	1	0	1	3	3	2	0
08/12/14	3	1	6	3	4	3	4	3	1	4	5	3
09/12/14	4	2	1	5	4	5	4	2	4	1	6	4
10/12/14	2	3	6	5	5	2	3	1	1	3	4	5
11/12/14	3	4	2	2	2	4	2	1	3	5	2	3
12/12/14	3	2	4	2	2	5	5	5	3	2	4	1
13/12/14	0	5	3	1	4	3	2	1	5	4	1	2
14/12/14	1	1	1	2	3	1	3	1	3	2	0	3
15/12/14	3	3	3	5	3	4	1	4	3	1	3	5
16/12/14	1	3	2	1	4	3	1	3	4	6	5	7
17/12/14	1	5	1	4	4	5	3	3	1	6	6	3
18/12/14	1	1	5	3	3	4	4	2	2	0	4	7
19/12/14	3	5	5	3	1	5	2	6	6	4	3	3
20/12/14	3	0	1	4	3	1	2	0	3	3	4	1
21/12/14	0	3	0	0	1	1	3	2	3	2	0	0
22/12/14	3	5	4	3	2	4	3	5	1	2	1	7
23/12/14	0	1	3	2	4	1	0	4	3	4	3	2
24/12/14	3	4	1	2	3	5	4	2	2	3	3	5
25/12/14	0	1	0	0	0	0	0	0	0	0	0	0
26/12/14	0	0	0	0	1	2	0	1	0	1	1	0
27/12/14	0	1	1	0	1	2	1	0	4	1	0	1
28/12/14	0	0	0	1	0	1	0	2	1	2	1	0
29/12/14	3	1	0	4	0	2	1	3	3	2	4	1
30/12/14	3	3	0	3	1	4	2	2	2	1	1	0
31/12/14	4	1	3	3	3	0	3	1	2	4	1	3
Total	58	71	68	72	77	89	72	74	82	90	76	80
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
01/12/14	7	3	4	4	1	2	3	3	2	2	3	1
02/12/14	6	3	7	2	2	2	5	3	5	3	0	2
03/12/14	2	3	6	5	5	4	5	2	2	3	2	0
04/12/14	2	1	1	1	2	3	2	2	1	0	3	0
05/12/14	2	2	3	2	5	3	1	2	3	2	1	0
06/12/14	0	2	1	4	3	0	0	2	1	2	1	0
07/12/14	2	3	5	1	1	1	3	3	3	1	0	0
08/12/14	0	2	4	2	4	1	4	2	2	2	3	0
09/12/14	1	3	3	4	7	4	3	1	2	2	2	1
10/12/14	3	2	4	3	5	1	2	1	1	0	1	0
11/12/14	2	7	4	4	0	0	3	4	2	1	1	0
12/12/14	2	4	2	3	1	3	1	1	2	0	3	0
13/12/14	0	4	1	2	2	3	2	1	0	1	3	0
14/12/14	2	4	1	1	1	1	2	3	0	1	2	0
15/12/14	3	2	3	3	4	4	3	1	1	4	1	0
16/12/14	2	2	3	2	4	3	6	2	1	0	2	1
17/12/14	3	4	4	1	5	4	5	3	0	3	3	3
18/12/14	4	4	2	4	2	1	2	3	1	0	1	0
19/12/14	2	5	5	1	2	1	3	1	1	2	3	0
20/12/14	1	3	4	0	1	0	1	2	0	1	2	0
21/12/14	1	2	4	3	1	0	0	4	1	0	1	1
22/12/14	0	3	3	4	2	3	1	1	0	3	3	1
23/12/14	4	5	2	2	3	2	2	1	1	0	0	0
24/12/14	1	1	0	4	3	1	2	0	0	0	0	0
25/12/14	0	0	0	0	0	0	0	0	0	0	0	0
26/12/14	2	1	2	2	2	2	0	0	3	0	1	0
27/12/14	1	1	2	5	0	1	0	1	2	1	2	0
28/12/14	3	2	1	3	0	2	1	2	1	0	3	1
29/12/14	3	3	2	3	1	1	4	0	4	0	0	0
30/12/14	2	2	2	0	3	2	1	1	1	1	1	0
31/12/14	3	1	2	2	0	0	2	2	1	0	1	0
Total	66	84	87	77	72	55	69	54	44	35	49	11



REPORTING PERIOD: JANUARY 2015

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	19	28	28	33	23	22	23	26	27	27	22	13
Bay 2	9	13	18	25	22	17	13	17	24	21	18	11
Bay 3	14	32	12	14	19	26	27	22	25	23	23	24
Bay4	13	29	6	9	9	17	25	19	24	21	14	26
Total	55	102	64	81	73	82	88	84	100	92	77	74
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 PM
Bay 1	23	29	34	22	28	23	23	23	18	16	12	6
Bay 2	17	23	26	21	25	17	9	11	11	11	4	2
Bay 3	25	28	19	24	19	15	16	16	17	17	17	5
Bay4	16	16	20	20	12	13	12	16	9	8	15	4
Total	81	96	99	87	84	68	60	66	55	52	48	17

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	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
01/01/15	0	0	0	0	0	0	0	0	0	0	0	0
02/01/15	2	3	2	1	3	3	4	1	2	1	0	4
03/01/15	0	2	2	4	1	0	1	1	1	4	2	0
04/01/15	0	3	2	0	1	0	3	2	2	2	3	0
05/01/15	2	4	4	3	0	3	3	3	4	2	3	2
06/01/15	0	5	2	3	2	3	2	3	2	5	5	2
07/01/15	4	3	0	4	5	1	3	2	5	1	4	2
08/01/15	2	3	1	1	4	8	1	1	4	4	6	3
09/01/15	1	3	4	4	5	4	3	4	4	4	2	6
10/01/15	2	2	3	1	2	5	4	1	4	4	2	0
11/01/15	1	4	0	2	1	1	3	2	2	2	0	1
12/01/15	1	1	2	4	4	3	1	2	4	3	3	4
13/01/15	2	3	1	2	3	1	5	5	4	2	2	1
14/01/15	1	2	5	2	5	4	4	4	4	3	2	4
15/01/15	4	3	1	4	4	4	6	3	2	2	2	1
16/01/15	7	5	3	2	2	1	5	2	4	4	1	3
17/01/15	1	3	3	3	1	2	2	4	4	1	0	2
18/01/15	2	1	1	2	2	2	0	2	4	3	1	0
19/01/15	2	7	1	4	3	1	5	5	2	3	3	5
20/01/15	1	5	2	6	5	3	0	0	4	5	5	4
21/01/15	1	4	2	4	3	5	2	3	5	0	7	4
22/01/15	3	5	2	2	4	5	2	5	3	6	5	3
23/01/15	3	6	4	5	3	4	3	4	4	6	1	1
24/01/15	3	2	1	3	1	2	3	2	4	1	1	2
25/01/15	0	1	0	1	1	2	3	2	2	4	2	4
26/01/15	2	4	3	4	2	1	3	5	1	2	3	3
27/01/15	0	3	4	1	1	2	5	5	3	4	0	3
28/01/15	1	2	4	3	1	3	2	2	2	4	1	5
29/01/15	2	5	1	1	1	3	3	3	3	3	7	1
30/01/15	3	3	2	1	2	2	4	3	5	5	2	3
31/01/15	1	2	1	1	1	3	1	2	1	2	1	1
Total	54	99	63	78	73	81	86	83	95	92	76	74
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
01/01/15	3	3	1	0	0	0	1	2	1	0	0	1
02/01/15	1	0	1	3	2	0	0	1	1	2	0	0
03/01/15	1	2	2	1	0	2	0	2	1	0	0	2
04/01/15	2	3	1	1	1	0	1	1	2	1	0	0
05/01/15	4	5	4	3	3	2	2	4	0	1	4	0
06/01/15	4	4	5	5	4	3	5	3	1	2	3	2
07/01/15	5	4	4	4	3	6	1	5	3	1	1	1
08/01/15	1	2	2	4	3	4	3	0	2	4	3	0
09/01/15	1	2	5	5	2	3	1	3	2	2	1	2
10/01/15	2	1	3	4	2	0	1	2	2	1	1	0
11/01/15	3	5	0	2	2	0	1	3	2	1	0	0
12/01/15	2	2	1	4	1	1	2	0	1	1	1	0
13/01/15	4	4	4	5	6	3	1	1	3	2	3	0
14/01/15	1	2	4	2	2	4	4	2	1	2	1	1
15/01/15	2	1	5	4	4	1	4	1	3	1	0	0
16/01/15	4	2	4	4	5	3	1	4	1	1	2	1
17/01/15	1	3	3	3	2	2	1	2	0	3	1	0
18/01/15	2	7	3	0	2	0	3	4	3	0	0	0
19/01/15	5	4	4	4	1	4	3	4	1	0	2	0
20/01/15	3	3	5	3	4	2	1	3	4	2	2	1
21/01/15	2	3	0	5	5	3	3	2	3	3	2	1
22/01/15	4	3	3	3	6	5	2	0	3	2	5	1
23/01/15	2	3	7	2	2	2	1	4	2	5	4	1
24/01/15	3	3	6	1	3	0	3	0	3	1	4	0
25/01/15	3	1	3	3	2	1	0	3	2	4	1	0
26/01/15	2	3	1	4	0	3	1	1	1	3	2	2
27/01/15	3	4	6	2	3	3	5	2	0	0	2	1
28/01/15	0	3	3	0	3	3	3	2	1	1	0	0
29/01/15	3	5	3	4	6	6	4	1	0	3	0	0
30/01/15	5	6	4	1	3	1	2	1	4	2	1	0
31/01/15	3	3	2	1	2	1	0	3	2	1	2	0
Total	81	96	99	87	84	68	60	66	55	52	48	17



REPORTING PERIOD: FEBRUARY 2015

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	26	23	27	24	33	25	25	24	32	31	25	22
Bay 2	12	18	25	20	26	17	13	19	26	24	23	14
Bay 3	24	17	15	20	24	27	34	30	17	34	26	34
Bay4	23	18	7	8	18	23	25	27	13	20	22	33
Total	85	76	74	72	101	92	97	100	88	109	96	103
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 PM
Bay 1	17	31	28	28	24	19	20	23	16	22	21	6
Bay 2	15	26	24	20	23	19	17	16	8	9	8	2
Bay 3	23	24	17	24	26	16	24	30	24	21	18	5
Bay4	21	16	14	24	16	13	18	22	15	25	9	5
Total	76	97	83	96	89	67	79	91	63	77	56	18

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	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
01/02/15	0	0	0	0	0	0	0	0	0	0	0	2
02/02/15	6	4	2	2	4	1	5	4	3	4	2	1
03/02/15	4	3	2	2	5	6	2	4	7	6	2	3
04/02/15	3	4	4	2	4	1	3	5	4	4	2	4
05/02/15	3	3	3	2	6	4	6	1	2	5	4	4
06/02/15	4	4	3	5	5	6	4	3	5	4	2	4
07/02/15	1	3	2	0	3	5	3	3	1	4	2	3
08/02/15	3	0	2	1	0	3	3	2	2	4	6	4
09/02/15	6	3	3	2	4	5	3	6	3	2	3	2
10/02/15	1	5	3	4	4	1	4	4	5	7	4	7
11/02/15	3	3	3	2	4	4	6	4	3	4	4	7
12/02/15	2	1	3	4	5	7	2	2	5	4	10	3
13/02/15	3	3	4	2	4	3	2	4	3	4	4	5
14/02/15	2	2	0	1	2	4	1	0	4	4	3	3
15/02/15	3	0	2	2	3	0	3	3	2	2	1	4
16/02/15	3	5	3	7	2	1	3	4	5	4	0	2
17/02/15	4	1	5	3	3	3	5	4	5	3	6	5
18/02/15	4	1	1	5	6	5	2	1	2	7	5	4
19/02/15	4	4	2	4	4	1	5	7	3	4	4	4
20/02/15	2	5	1	1	3	6	4	6	0	4	4	2
21/02/15	1	1	3	3	3	3	1	2	3	3	2	2
22/02/15	1	3	0	0	4	1	3	2	3	3	3	2
23/02/15	2	3	5	2	3	2	4	4	2	6	5	3
24/02/15	4	3	4	7	4	4	2	4	3	5	3	5
25/02/15	5	6	3	2	4	6	6	2	2	4	5	4
26/02/15	2	1	6	3	3	4	6	4	5	1	2	7
27/02/15	3	3	2	2	6	4	4	5	3	3	6	5
28/02/15	2	1	1	2	2	0	3	5	2	3	1	2
01/03/15	0	0	2	0	0	0	0	0	0	0	0	0
02/03/15	0	0	0	0	0	0	0	0	0	0	0	0
03/03/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	81	75	74	72	100	90	95	95	87	108	95	103
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
01/02/15	4	5	2	1	2	0	1	5	1	1	0	0
02/02/15	3	3	5	1	4	4	2	3	2	4	1	1
03/02/15	5	4	2	6	5	3	4	6	2	4	2	0
04/02/15	4	1	3	5	3	4	3	4	4	2	1	0
05/02/15	3	2	5	4	2	2	4	4	3	2	2	3
06/02/15	0	4	0	2	2	1	2	3	2	4	2	3
07/02/15	3	4	0	3	1	2	2	4	2	2	1	0
08/02/15	3	0	1	1	4	1	2	4	1	1	1	0
09/02/15	3	2	4	4	3	3	4	3	5	4	3	1
10/02/15	2	3	5	3	4	5	4	5	4	1	2	0
11/02/15	3	3	3	7	3	5	4	2	5	4	2	1
12/02/15	4	3	6	6	4	2	3	6	3	5	3	1
13/02/15	3	6	2	3	8	2	3	2	2	2	4	0
14/02/15	0	2	3	2	1	2	1	3	1	2	3	0
15/02/15	2	4	1	3	2	0	3	2	3	3	1	1
16/02/15	6	4	6	6	3	2	3	3	2	6	0	0
17/02/15	1	4	5	4	3	3	2	4	1	3	2	0
18/02/15	1	3	3	6	0	3	2	5	2	4	0	1
19/02/15	4	4	3	4	0	5	7	1	1	4	2	1
20/02/15	0	5	1	4	5	3	1	3	1	0	5	1
21/02/15	2	5	0	3	4	1	3	1	2	2	3	0
22/02/15	0	2	3	0	4	2	1	1	4	4	1	0
23/02/15	1	6	4	3	3	1	2	3	2	4	2	1
24/02/15	4	3	3	4	4	2	6	4	3	2	2	0
25/02/15	5	3	6	4	4	2	3	4	1	3	4	2
26/02/15	4	4	3	1	3	1	4	1	2	1	4	0
27/02/15	2	4	2	6	6	4	1	3	2	3	1	1
28/02/15	4	4	2	0	2	2	2	3	0	0	2	0
01/03/15	0	0	2	0	0	0	0	0	0	0	0	0
02/03/15	0	0	0	0	0	0	0	0	0	0	0	0
03/03/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	76	97	85	96	89	67	79	92	63	77	56	18



REPORTING PERIOD: MARCH 2015

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	26	27	35	34	31	28	24	27	26	31	24	23
Bay 2	10	15	27	31	22	28	11	19	21	27	22	20
Bay 3	19	16	20	13	24	30	37	29	28	37	28	31
Bay4	19	10	14	10	18	20	27	25	26	31	25	27
Total	74	68	96	88	95	106	99	100	101	126	99	101
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 PM
Bay 1	24	32	34	36	35	32	21	26	22	18	19	12
Bay 2	19	23	30	30	29	30	11	18	12	12	10	2
Bay 3	23	20	21	30	28	23	26	21	26	19	17	7
Bay4	25	23	16	27	29	15	25	16	18	18	23	6
Total	91	98	101	123	121	100	83	81	78	67	69	27

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	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
01/03/15	0	0	0	0	0	0	0	0	0	0	0	3
02/03/15	3	5	2	1	3	4	4	4	3	6	2	2
03/03/15	4	2	3	4	6	1	5	3	7	2	4	3
04/03/15	2	2	4	0	2	7	4	6	2	1	5	3
05/03/15	1	3	4	4	4	2	3	4	6	5	2	6
06/03/15	5	1	2	5	5	5	2	6	3	5	4	2
07/03/15	2	1	2	1	4	3	4	1	0	0	0	0
08/03/15	1	1	2	1	1	6	3	2	1	3	3	4
09/03/15	6	1	6	2	2	1	5	3	3	3	1	6
10/03/15	4	1	6	2	2	3	3	5	3	4	5	3
11/03/15	0	1	4	3	2	2	2	8	0	6	5	3
12/03/15	1	2	1	5	3	3	3	1	3	6	6	0
13/03/15	1	2	3	3	2	3	5	3	3	6	5	1
14/03/15	2	2	2	0	2	5	3	4	3	4	0	5
15/03/15	2	1	0	0	3	1	2	1	3	4	3	3
16/03/15	2	4	5	3	4	2	2	5	5	5	3	3
17/03/15	2	2	6	4	4	2	3	3	4	4	4	5
18/03/15	4	2	5	4	6	7	4	0	4	1	6	4
19/03/15	3	5	3	1	5	3	6	5	3	3	2	5
20/03/15	4	2	0	4	4	7	5	1	4	4	3	4
21/03/15	2	1	0	4	3	1	2	2	3	4	3	2
22/03/15	0	1	1	1	1	1	1	2	3	2	2	0
23/03/15	2	5	5	4	2	2	3	5	8	4	4	7
24/03/15	6	0	1	6	6	2	4	2	3	5	3	2
25/03/15	2	4	6	3	2	4	4	5	3	2	3	5
26/03/15	3	1	2	3	3	4	4	3	3	6	0	3
27/03/15	2	3	6	4	2	5	1	3	3	7	2	4
28/03/15	1	1	2	4	1	4	2	2	3	2	2	0
29/03/15	1	0	1	1	3	2	0	1	1	7	2	2
30/03/15	2	3	5	3	5	2	4	4	5	4	6	9
31/03/15	2	7	5	3	1	6	2	2	3	4	6	2
Total	72	66	94	83	93	100	95	96	98	119	96	101
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
01/03/15	4	1	2	1	1	1	2	4	4	1	2	1
02/03/15	3	1	3	4	4	3	3	2	2	4	3	1
03/03/15	4	2	3	3	6	3	2	4	3	2	2	2
04/03/15	6	4	5	2	6	3	2	4	1	2	2	0
05/03/15	4	4	3	4	5	7	3	1	5	0	2	0
06/03/15	3	5	3	2	4	2	3	1	4	1	2	0
07/03/15	0	0	0	2	6	4	1	1	1	0	6	1
08/03/15	1	2	1	3	1	4	0	3	3	1	3	0
09/03/15	3	3	5	7	5	3	5	4	3	2	2	2
10/03/15	5	0	2	5	4	6	3	2	0	2	4	1
11/03/15	2	4	5	6	3	2	4	2	1	5	1	0
12/03/15	1	1	4	6	5	2	1	2	3	2	2	1
13/03/15	2	5	4	5	6	1	1	2	4	3	2	2
14/03/15	2	1	3	3	3	3	3	1	1	3	2	0
15/03/15	1	5	2	1	2	3	2	3	2	0	2	1
16/03/15	1	6	5	5	6	4	2	3	2	5	3	2
17/03/15	3	4	2	4	4	4	5	1	4	4	0	2
18/03/15	4	9	5	1	4	3	4	5	1	1	1	1
19/03/15	5	2	4	4	4	3	5	5	1	0	1	1
20/03/15	4	6	5	6	3	4	4	3	4	4	2	1
21/03/15	0	4	3	2	4	2	0	0	3	1	1	1
22/03/15	4	1	2	2	2	4	0	1	2	3	2	0
23/03/15	4	3	4	6	3	5	4	3	1	3	3	0
24/03/15	3	2	4	4	2	3	5	2	2	2	3	1
25/03/15	3	4	4	5	4	3	2	4	2	5	6	0
26/03/15	2	6	4	4	6	3	2	5	4	4	2	0
27/03/15	6	2	2	7	3	4	2	0	3	3	1	2
28/03/15	1	5	2	4	2	3	1	5	3	0	2	0
29/03/15	4	3	3	3	3	1	3	1	4	0	1	2
30/03/15	6	3	4	5	4	4	5	2	3	2	1	1
31/03/15	0	0	3	7	6	3	4	5	3	2	3	1
Total	91	98	101	123	121	100	83	81	79	67	69	27



REPORTING PERIOD: APRIL 2015

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	18	23	23	31	35	24	16	15	24	25	30	17
Bay 2	12	11	16	23	29	32	10	12	20	21	17	21
Bay 3	20	15	11	10	23	35	22	27	25	33	31	33
Bay4	11	8	3	5	14	19	27	18	16	26	16	27
Total	61	57	53	69	101	110	75	72	85	105	94	98
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 PM
Bay 1	16	19	25	28	35	22	17	16	20	19	16	6
Bay 2	14	15	23	19	26	22	19	9	12	17	10	4
Bay 3	26	22	14	20	22	26	15	11	20	17	19	7
Bay4	16	14	14	13	14	23	11	8	9	10	18	5
Total	72	70	76	80	97	93	62	44	61	63	63	22

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	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
01/04/15	0	0	0	0	0	0	0	0	0	0	0	7
02/04/15	1	4	2	2	5	6	2	2	2	4	5	6
03/04/15	4	2	4	2	6	3	5	1	2	3	3	4
04/04/15	4	1	0	1	1	2	1	2	1	2	2	3
05/04/15	0	1	1	0	0	1	2	1	2	1	0	1
06/04/15	3	3	0	2	4	2	1	5	1	1	2	2
07/04/15	2	1	2	1	4	4	4	2	5	8	3	5
08/04/15	1	0	2	4	3	4	3	1	2	5	6	5
09/04/15	3	0	5	4	4	5	5	4	3	4	6	3
10/04/15	4	2	0	5	5	6	4	5	5	5	7	6
11/04/15	0	1	1	3	5	4	1	0	0	0	0	0
12/04/15	1	3	0	1	3	2	2	0	2	2	3	2
13/04/15	3	3	3	4	5	2	0	5	6	6	4	3
14/04/15	4	3	3	2	3	0	4	2	3	3	1	2
15/04/15	1	3	1	2	1	4	2	4	2	3	3	1
16/04/15	1	4	1	3	3	3	2	8	6	7	2	5
17/04/15	4	1	2	3	4	8	3	0	3	5	3	3
18/04/15	2	2	1	1	3	5	3	0	2	4	5	2
19/04/15	3	0	1	2	1	2	3	2	1	1	4	1
20/04/15	0	2	5	3	5	4	2	3	2	4	3	4
21/04/15	1	0	1	2	3	3	1	1	1	5	3	3
22/04/15	0	0	0	1	1	1	0	1	5	2	2	5
23/04/15	0	1	0	2	3	7	1	1	1	3	6	6
24/04/15	3	2	2	3	1	9	4	3	5	3	3	3
25/04/15	1	3	2	0	3	0	4	4	1	0	2	2
26/04/15	0	3	0	0	1	1	1	2	2	1	1	1
27/04/15	5	4	4	5	3	3	4	2	6	4	5	1
28/04/15	3	2	3	2	4	4	4	0	2	5	3	5
29/04/15	4	2	2	4	5	2	2	4	7	5	4	2
30/04/15	1	2	3	3	6	5	2	3	3	7	3	5
01/05/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	59	55	51	67	95	102	72	68	83	103	94	98
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 PM
01/04/15	4	4	4	5	6	4	3	1	4	3	3	2
02/04/15	2	3	4	4	2	6	4	2	2	2	3	0
03/04/15	0	4	2	3	3	2	3	2	1	0	1	0
04/04/15	1	2	3	4	4	1	2	0	3	4	1	0
05/04/15	3	2	2	1	0	3	2	1	1	2	1	1
06/04/15	1	3	1	3	2	2	2	1	3	2	1	0
07/04/15	3	3	5	4	4	7	1	0	2	2	4	0
08/04/15	4	1	4	4	4	3	1	4	2	3	2	1
09/04/15	4	3	4	2	3	6	6	3	3	2	3	2
10/04/15	1	6	4	1	3	5	2	1	5	1	4	1
11/04/15	0	2	1	1	2	1	2	2	2	0	3	1
12/04/15	4	1	1	4	5	0	1	2	1	3	4	0
13/04/15	6	3	2	4	5	5	2	3	2	3	1	2
14/04/15	3	2	3	1	1	1	1	0	2	1	2	2
15/04/15	2	4	0	0	5	4	4	2	1	3	4	1
16/04/15	2	2	4	3	6	4	3	2	3	6	1	1
17/04/15	3	2	2	5	5	5	3	2	2	2	5	3
18/04/15	0	1	1	4	1	1	4	0	1	2	0	0
19/04/15	3	2	1	2	2	3	1	1	2	0	3	1
20/04/15	3	1	2	1	1	3	1	2	3	1	0	1
21/04/15	0	1	1	1	0	0	0	0	0	0	0	0
22/04/15	0	0	3	1	3	2	3	1	1	2	0	0
23/04/15	3	2	0	1	4	3	4	1	1	2	2	0
24/04/15	4	0	7	3	4	1	1	2	1	2	0	1
25/04/15	2	2	1	1	1	0	1	1	2	1	0	0
26/04/15	2	3	2	3	1	2	0	1	2	1	1	0
27/04/15	5	2	5	3	5	3	1	1	4	2	3	0
28/04/15	2	4	4	6	5	5	0	2	1	4	4	0
29/04/15	2	2	1	4	6	5	1	3	4	4	4	1
30/04/15	3	3	2	2	4	6	3	3	1	3	3	1
01/05/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	72	70	76	81	97	93	62	44	61	63	63	22



REPORTING PERIOD: MAY 2015

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	20	28	23	27	44	25	27	20	34	27	30	21
Bay 2	7	21	12	29	35	20	18	18	24	26	26	17
Bay 3	19	23	15	15	28	31	26	32	32	39	33	37
Bay4	14	15	13	8	23	28	25	22	35	30	25	34
Total	60	87	63	79	130	104	96	92	125	122	114	109
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 PM
Bay 1	21	31	27	32	33	27	24	28	14	16	19	3
Bay 2	23	24	27	19	28	24	14	17	16	14	12	3
Bay 3	30	25	22	25	31	15	19	13	17	22	23	8
Bay4	22	24	24	17	19	11	15	5	12	11	20	5
Total	96	104	100	93	111	77	72	63	59	63	74	19

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	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
01/05/15	0	0	0	0	0	0	0	0	0	0	6	2
02/05/15	1	1	0	2	3	3	4	0	1	2	0	2
03/05/15	4	1	0	1	0	2	1	0	4	1	1	2
04/05/15	1	4	2	1	5	4	4	5	5	4	3	5
05/05/15	2	3	4	3	5	4	2	3	3	6	1	7
06/05/15	1	5	4	4	4	4	3	7	3	8	6	4
07/05/15	1	3	2	1	6	5	6	5	2	5	7	3
08/05/15	3	0	3	2	7	3	2	3	6	3	5	3
09/05/15	3	1	0	1	5	3	2	0	4	2	4	1
10/05/15	0	0	0	3	2	1	1	0	3	0	2	1
11/05/15	2	3	5	2	4	1	3	4	3	7	3	1
12/05/15	1	3	3	1	2	5	5	5	5	6	4	4
13/05/15	1	4	3	2	3	5	3	3	7	8	3	4
14/05/15	3	3	2	4	7	7	6	5	5	5	4	9
15/05/15	3	3	1	3	7	8	6	4	5	6	8	1
16/05/15	4	3	2	2	2	5	3	1	2	3	4	5
17/05/15	1	3	2	2	2	1	3	2	3	1	5	1
18/05/15	2	2	1	5	8	4	1	1	1	4	3	2
19/05/15	1	3	1	4	2	3	1	2	6	5	7	4
20/05/15	3	2	2	3	6	4	2	6	6	5	5	3
21/05/15	1	6	3	1	6	2	4	6	4	4	5	4
22/05/15	0	2	5	2	6	2	4	5	2	4	4	3
23/05/15	1	4	1	1	2	3	2	1	4	3	1	4
24/05/15	2	0	0	1	2	3	2	2	2	1	2	2
25/05/15	2	4	5	1	4	3	1	4	2	5	3	4
26/05/15	1	5	3	4	4	1	5	1	4	2	4	3
27/05/15	0	4	2	5	4	4	5	5	9	3	4	5
28/05/15	7	3	0	4	5	2	3	1	4	6	4	8
29/05/15	7	3	3	4	8	4	5	2	8	3	2	5
30/05/15	0	5	1	1	3	3	1	4	3	2	2	3
31/05/15	1	0	1	3	2	3	0	3	3	2	2	4
Total	59	83	61	73	126	102	90	90	119	116	114	109
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 PM
01/05/15	5	7	2	2	5	1	3	3	2	1	3	0
02/05/15	3	2	2	2	3	1	3	1	1	2	1	0
03/05/15	1	2	1	2	3	0	4	2	1	2	1	1
04/05/15	2	3	3	2	5	4	3	2	6	1	1	1
05/05/15	2	3	3	4	3	4	1	2	1	1	4	0
06/05/15	3	4	5	4	3	2	1	3	2	3	3	2
07/05/15	3	2	3	3	4	4	2	2	3	4	2	0
08/05/15	2	5	4	3	3	4	3	1	1	2	2	2
09/05/15	3	4	1	3	2	2	0	1	0	2	3	0
10/05/15	4	2	4	1	3	0	4	0	1	1	2	0
11/05/15	4	0	2	3	2	2	0	3	1	1	1	0
12/05/15	6	6	5	3	4	4	4	3	1	1	3	4
13/05/15	4	2	7	3	7	6	1	1	3	4	5	0
14/05/15	4	5	7	5	5	5	4	2	2	1	4	1
15/05/15	1	3	4	3	5	2	8	2	2	4	2	1
16/05/15	0	0	5	3	7	1	0	3	2	2	2	0
17/05/15	1	3	3	1	4	2	0	1	2	5	1	0
18/05/15	2	2	2	2	3	3	3	2	1	1	1	0
19/05/15	4	3	0	6	5	5	0	1	1	1	7	0
20/05/15	5	5	4	2	5	3	3	3	3	3	2	0
21/05/15	6	3	3	3	5	3	2	0	1	3	3	0
22/05/15	2	2	1	4	1	3	2	1	1	0	1	0
23/05/15	1	5	0	1	0	0	2	2	0	1	0	1
24/05/15	2	2	1	4	0	2	0	1	3	1	2	0
25/05/15	3	4	7	4	4	2	2	1	5	3	1	0
26/05/15	1	2	6	7	6	1	4	3	1	2	5	2
27/05/15	7	6	3	1	3	5	2	2	5	1	4	0
28/05/15	5	6	4	3	3	2	5	4	2	3	5	1
29/05/15	5	4	3	5	4	4	3	4	3	2	2	2
30/05/15	3	5	3	0	2	0	1	5	1	1	1	0
31/05/15	2	2	3	4	2	0	2	2	1	4	0	1
Total	96	104	101	93	111	77	72	63	59	63	74	19



REPORTING PERIOD: JUNE 2015

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	20	28	29	30	25	26	21	31	30	20	24	21
Bay 2	9	16	22	23	21	20	11	24	23	21	19	10
Bay 3	21	19	15	23	32	28	33	30	36	42	36	32
Bay4	16	13	12	15	34	21	24	32	26	45	28	30
Total	66	76	78	91	112	95	89	117	115	128	107	93
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 PM
Bay 1	23	34	27	23	25	24	17	24	18	23	8	3
Bay 2	9	28	27	19	15	21	7	14	15	12	6	4
Bay 3	33	31	30	24	26	23	14	16	18	22	17	6
Bay4	30	30	24	23	16	17	13	12	13	22	9	6
Total	95	123	108	89	82	85	51	66	64	79	40	19

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	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
01/06/15	0	0	0	0	0	0	0	0	0	0	6	1
02/06/15	1	4	2	7	7	4	0	4	7	3	5	6
03/06/15	1	4	3	3	4	5	3	4	2	6	2	5
04/06/15	4	1	2	3	5	5	5	4	5	5	7	6
05/06/15	4	1	3	3	3	3	0	5	6	6	6	3
06/06/15	2	2	1	1	5	2	0	5	2	4	3	2
07/06/15	0	2	1	1	2	2	3	3	1	2	1	0
08/06/15	2	3	4	1	2	5	2	4	3	3	1	2
09/06/15	7	1	4	3	5	2	7	3	5	5	1	2
10/06/15	3	4	3	5	3	4	5	4	4	3	4	4
11/06/15	4	5	3	3	3	3	4	5	2	7	3	6
12/06/15	2	3	5	3	4	6	4	5	6	1	6	6
13/06/15	1	3	2	0	3	4	1	2	2	3	1	1
14/06/15	1	0	0	1	4	1	2	1	2	3	3	3
15/06/15	5	3	4	1	5	2	5	6	2	7	7	4
16/06/15	3	2	6	3	6	3	2	5	6	5	4	3
17/06/15	2	5	3	4	4	3	3	5	6	3	1	0
18/06/15	1	2	2	4	3	2	1	4	5	4	3	3
19/06/15	0	2	2	1	4	0	4	4	3	3	4	2
20/06/15	1	0	2	1	0	1	0	3	1	1	2	0
21/06/15	0	2	1	0	1	1	1	2	2	2	1	1
22/06/15	0	4	5	4	1	2	6	7	6	7	7	4
23/06/15	2	3	2	4	3	4	4	4	3	11	8	6
24/06/15	2	1	5	5	5	4	6	6	5	5	5	3
25/06/15	4	4	1	4	6	3	5	2	7	7	0	6
26/06/15	2	2	3	5	4	3	3	6	7	6	3	1
27/06/15	0	3	2	3	3	2	4	1	2	4	1	4
28/06/15	2	1	0	2	3	3	3	3	2	1	4	3
29/06/15	3	2	3	4	6	6	2	3	7	3	6	4
30/06/15	1	2	2	5	2	2	1	3	1	3	2	2
01/07/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	60	71	76	84	106	87	86	113	112	123	107	93
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
01/06/15	1	5	7	4	2	2	1	2	4	4	1	1
02/06/15	3	5	5	4	4	5	4	2	0	4	2	1
03/06/15	7	3	5	4	2	4	4	4	2	1	3	0
04/06/15	5	8	4	5	5	5	4	4	2	4	1	1
05/06/15	5	5	2	4	4	4	1	0	4	2	3	2
06/06/15	2	4	2	1	1	1	0	0	1	0	0	0
07/06/15	3	3	1	0	0	1	0	3	0	0	0	0
08/06/15	1	4	4	1	1	2	1	3	4	2	2	0
09/06/15	3	6	6	5	6	5	2	3	4	1	1	0
10/06/15	5	4	6	3	2	6	2	4	3	3	1	0
11/06/15	3	4	3	6	4	2	3	4	3	4	1	0
12/06/15	6	5	0	4	5	4	3	2	2	3	2	1
13/06/15	2	1	1	2	0	3	0	1	1	1	0	3
14/06/15	4	4	2	1	1	1	3	2	0	4	0	1
15/06/15	6	8	3	1	4	3	1	4	4	3	0	1
16/06/15	4	7	2	5	3	2	1	4	0	3	1	0
17/06/15	0	0	5	3	1	1	2	1	2	1	0	1
18/06/15	4	5	3	3	2	0	1	2	1	3	1	0
19/06/15	0	1	4	1	1	4	2	0	1	1	1	0
20/06/15	1	3	2	2	0	0	0	0	1	2	0	1
21/06/15	2	0	2	0	1	0	1	0	1	1	1	0
22/06/15	4	5	5	5	6	1	0	4	4	2	0	0
23/06/15	4	3	3	5	4	4	4	2	3	5	1	1
24/06/15	3	5	8	8	4	6	1	1	3	3	1	1
25/06/15	3	4	7	2	3	6	3	3	6	3	2	0
26/06/15	4	7	5	2	5	2	2	2	2	5	2	0
27/06/15	3	2	3	1	0	6	1	1	0	3	4	1
28/06/15	3	3	2	2	4	1	1	2	1	5	0	0
29/06/15	4	6	3	4	6	2	1	3	4	6	4	1
30/06/15	0	3	3	1	1	2	2	2	2	0	5	2
01/07/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	95	123	108	89	82	85	51	66	64	79	40	19



REPORTING PERIOD: JULY 2015

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	15	21	24	25	33	27	18	22	27	24	25	15
Bay 2	9	25	21	25	34	26	15	20	21	29	25	13
Bay 3	29	15	16	28	29	34	36	31	30	43	40	37
Bay4	11	9	14	21	24	25	29	27	29	40	28	32
Total	64	70	75	99	120	112	98	100	107	136	118	97
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 PM
Bay 1	28	27	29	31	33	20	12	23	19	23	13	4
Bay 2	21	25	28	36	22	32	15	18	16	15	17	2
Bay 3	43	32	37	27	28	25	19	22	27	23	16	5
Bay4	35	31	27	27	22	21	12	10	15	18	14	4
Total	127	115	121	121	105	98	58	73	77	79	60	15

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	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
01/07/15	0	0	0	0	0	0	0	0	0	0	5	1
02/07/15	5	1	1	3	8	5	5	5	3	6	8	6
03/07/15	3	3	1	3	5	7	1	3	4	5	4	2
04/07/15	1	1	1	3	6	2	0	3	4	3	4	0
05/07/15	0	2	2	2	4	2	3	4	4	2	2	1
06/07/15	1	6	5	3	2	3	3	7	1	6	6	5
07/07/15	3	3	2	4	5	1	6	2	7	6	1	5
08/07/15	3	4	4	3	5	5	6	3	4	6	2	4
09/07/15	3	1	6	3	2	4	3	5	5	6	6	6
10/07/15	3	1	3	5	7	4	2	2	3	5	4	0
11/07/15	1	2	2	2	0	5	2	3	2	1	2	3
12/07/15	0	3	2	1	2	2	1	1	3	1	1	2
13/07/15	4	0	4	8	5	2	2	0	6	2	4	2
14/07/15	1	5	2	4	4	4	1	2	3	5	4	5
15/07/15	4	3	1	4	2	4	5	3	1	4	4	4
16/07/15	2	2	1	5	6	7	2	3	3	7	5	5
17/07/15	2	2	3	2	4	4	6	3	5	5	6	2
18/07/15	1	1	2	2	1	2	0	5	2	2	2	1
19/07/15	1	2	0	1	1	2	0	2	4	1	4	1
20/07/15	3	0	3	2	4	2	3	6	2	6	6	4
21/07/15	2	2	2	4	7	4	1	5	6	7	3	3
22/07/15	5	3	2	3	3	5	8	4	5	5	5	6
23/07/15	4	2	2	4	5	7	5	1	3	6	4	4
24/07/15	2	2	2	3	5	2	5	5	1	6	3	4
25/07/15	0	3	1	2	5	1	5	2	3	2	1	3
26/07/15	0	2	1	1	3	2	1	2	1	3	1	4
27/07/15	2	3	3	3	1	3	3	5	5	5	3	1
28/07/15	1	2	1	3	3	5	6	3	4	4	3	7
29/07/15	3	1	4	4	4	5	5	3	5	5	5	4
30/07/15	2	1	6	7	4	3	3	1	3	5	8	1
31/07/15	1	3	4	4	4	4	5	5	3	7	2	1
Total	63	66	73	98	119	109	95	99	105	131	118	97
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
01/07/15	7	3	6	6	5	4	3	4	3	2	3	0
02/07/15	1	6	6	4	3	5	3	2	0	4	5	0
03/07/15	6	2	3	5	4	6	1	2	2	3	1	2
04/07/15	3	3	3	2	1	2	0	0	3	2	2	1
05/07/15	4	4	0	4	2	0	2	1	3	1	0	0
06/07/15	7	4	3	1	5	6	0	2	6	4	2	1
07/07/15	5	2	4	4	6	7	4	5	3	5	2	0
08/07/15	6	6	4	6	6	2	1	0	6	4	2	0
09/07/15	5	1	5	6	3	5	2	2	6	2	1	0
10/07/15	5	6	4	4	7	4	1	1	3	4	2	0
11/07/15	2	2	6	2	2	0	0	3	2	3	0	0
12/07/15	2	4	3	3	1	0	1	5	4	1	1	0
13/07/15	1	3	4	6	3	1	2	3	4	3	1	1
14/07/15	3	2	7	2	6	1	1	1	1	5	4	1
15/07/15	4	3	6	4	5	4	2	3	0	2	3	0
16/07/15	4	4	3	4	6	4	0	4	1	3	2	0
17/07/15	4	5	3	4	0	5	2	3	1	1	1	0
18/07/15	2	4	4	0	0	2	2	2	1	1	1	1
19/07/15	6	3	3	2	1	0	3	3	1	1	1	0
20/07/15	5	7	4	7	5	4	6	1	1	4	5	1
21/07/15	6	3	7	3	6	3	4	2	2	2	1	2
22/07/15	7	5	3	3	6	3	2	2	1	1	2	3
23/07/15	5	2	6	6	5	6	3	3	2	2	3	1
24/07/15	5	5	2	5	0	4	2	3	1	1	3	0
25/07/15	2	3	0	2	2	1	1	1	4	2	1	0
26/07/15	4	3	1	0	2	3	0	2	2	3	2	0
27/07/15	3	5	5	6	2	2	2	3	2	5	2	0
28/07/15	3	3	3	3	4	6	1	4	3	2	3	1
29/07/15	4	3	5	6	4	3	3	1	3	4	1	0
30/07/15	4	3	3	8	1	1	4	3	3	2	1	0
31/07/15	2	6	5	3	2	4	0	2	3	0	2	0
Total	127	115	121	121	105	98	58	73	77	79	60	15

REPORTING PERIOD: AUGUST 2015

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	20	25	31	28	35	25	28	21	28	26	19	11
Bay 2	12	23	27	24	24	18	13	17	20	26	18	13
Bay 3	22	18	17	24	24	21	46	36	35	39	37	34
Bay 4	12	11	11	15	21	11	40	26	33	28	33	22
Total	66	77	86	91	104	75	127	100	116	119	107	80
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	30	31	27	31	25	21	20	20	20	19	23	4
Bay 2	20	29	36	24	24	12	6	15	11	14	11	2
Bay 3	34	23	30	24	21	23	9	23	20	25	15	2
Bay 4	21	31	23	20	15	8	13	12	11	13	15	1
Total	105	114	116	99	85	64	48	70	62	71	64	9

Traffic Movement Assessment Data

	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
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
01/08/15	1	4	2	1	1	3	3	1	2	5	4	4
02/08/15	1	0	2	1	3	1	2	3	3	2	2	4
03/08/15	1	3	4	5	3	1	6	4	4	5	6	1
04/08/15	3	3	5	4	6	2	5	4	5	4	4	4
05/08/15	5	3	6	5	4	2	7	5	3	5	5	4
06/08/15	1	2	4	5	6	4	4	5	3	4	6	2
07/08/15	1	5	3	4	5	4	8	4	5	7	6	2
08/08/15	2	2	3	2	5	2	2	3	1	3	3	0
09/08/15	2	0	1	2	3	2	0	4	3	3	1	0
10/08/15	3	4	1	2	5	3	5	4	6	2	2	3
11/08/15	0	5	5	4	3	2	6	5	7	7	0	1
12/08/15	3	4	2	4	3	1	5	3	6	5	2	1
13/08/15	1	1	2	3	4	3	1	0	4	4	8	4
14/08/15	3	7	2	4	5	3	3	4	2	5	5	4
15/08/15	1	2	4	0	4	4	4	3	3	1	3	3
16/08/15	3	1	1	0	3	1	3	4	3	3	3	2
17/08/15	2	4	4	1	3	2	7	4	5	4	3	2
18/08/15	3	4	4	2	4	2	5	1	5	5	4	3
19/08/15	2	2	4	1	2	3	5	6	5	4	4	3
20/08/15	2	4	2	4	5	2	4	2	5	3	3	4
21/08/15	3	0	5	4	2	3	4	5	4	2	6	3
22/08/15	3	2	0	3	5	0	5	2	1	4	2	2
23/08/15	3	0	0	2	2	1	1	2	2	1	2	1
24/08/15	2	4	3	2	1	4	4	3	5	5	1	2
25/08/15	3	0	3	6	3	2	3	3	4	4	2	2
26/08/15	0	4	3	3	4	4	4	3	4	4	4	3
27/08/15	3	0	2	3	2	3	6	3	4	4	4	3
28/08/15	1	1	5	6	2	4	3	5	1	3	4	4
29/08/15	4	2	2	2	1	3	2	1	3	5	1	2
30/08/15	2	2	0	3	2	2	1	1	4	3	3	2
31/08/15	2	2	2	3	3	2	9	3	4	3	4	5
Total	66	77	86	91	104	75	127	100	116	119	107	80
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
01/08/15	1	4	0	0	3	0	1	1	2	1	2	0
02/08/15	6	2	1	2	1	1	3	3	1	3	1	1
03/08/15	2	5	5	4	5	4	3	4	3	3	3	0
04/08/15	6	6	3	9	4	1	1	6	4	1	3	0
05/08/15	4	7	4	7	4	4	2	2	3	1	5	0
06/08/15	6	3	2	4	7	1	2	1	2	6	1	0
07/08/15	7	5	3	4	4	5	1	1	1	5	3	0
08/08/15	3	2	3	4	2	1	1	2	1	4	2	0
09/08/15	4	7	0	2	2	2	1	1	3	2	1	0
10/08/15	4	5	5	5	3	2	2	2	3	4	3	0
11/08/15	3	3	7	1	2	5	1	2	3	2	2	0
12/08/15	3	3	3	5	1	1	1	2	0	1	1	1
13/08/15	3	2	6	5	2	3	5	5	2	3	0	1
14/08/15	3	6	7	2	4	2	1	2	2	2	5	0
15/08/15	3	4	2	1	2	1	1	2	0	2	2	0
16/08/15	4	3	1	2	1	2	3	4	0	2	2	0
17/08/15	3	4	6	2	4	3	1	2	3	3	0	1
18/08/15	4	3	6	6	3	4	2	2	5	4	3	0
19/08/15	4	4	3	4	3	2	1	2	1	4	3	0
20/08/15	3	2	7	1	2	4	2	3	3	0	3	0
21/08/15	1	3	4	1	4	0	0	3	0	1	3	0
22/08/15	2	3	0	1	6	0	1	1	2	1	1	1
23/08/15	2	4	2	1	2	2	2	1	2	1	2	1
24/08/15	4	3	5	0	0	1	1	2	4	0	1	0
25/08/15	3	3	5	4	2	1	1	3	1	4	0	2
26/08/15	2	2	5	5	3	2	2	1	2	2	1	0
27/08/15	3	3	3	2	2	2	0	1	2	3	3	0
28/08/15	4	4	5	4	4	4	1	1	4	3	1	1
29/08/15	2	2	6	2	1	1	3	1	2	0	3	0
30/08/15	2	3	3	3	0	1	1	2	0	2	1	0
31/08/15	4	4	4	6	2	2	1	5	1	1	3	0
Total	105	114	116	99	85	64	48	70	62	71	64	9

REPORTING PERIOD: SEPTEMBER 2015

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	22	31	37	25	25	22	23	26	29	17	16	12
Bay 2	9	25	34	19	21	20	14	15	24	18	13	12
Bay 3	15	11	13	22	17	22	27	16	16	23	33	29
Bay 4	11	5	4	14	15	16	25	15	18	18	24	27
Total	57	72	88	80	78	80	89	72	87	76	86	80
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	27	39	29	26	17	20	22	24	20	16	3
Bay 2	16	28	37	27	19	14	6	16	18	12	7	1
Bay 3	21	20	21	27	20	16	17	20	17	15	21	3
Bay 4	18	15	15	16	7	9	9	9	10	13	15	3
Total	72	90	112	99	72	56	52	67	69	60	59	10

Traffic Movement Assessment Data

	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
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
01/09/15	1	4	2	3	5	2	3	5	3	4	5	2
02/09/15	2	4	2	3	4	3	7	2	5	3	4	6
03/09/15	1	3	6	5	3	4	3	3	5	4	7	5
04/09/15	1	2	3	2	2	5	2	4	1	3	3	2
05/09/15	0	2	3	0	2	2	2	0	5	2	2	1
06/09/15	2	1	0	1	2	2	0	3	3	1	1	2
07/09/15	4	4	3	5	5	2	3	4	5	2	5	4
08/09/15	0	3	3	3	2	4	2	1	2	5	6	3
09/09/15	3	3	3	1	2	0	5	2	3	0	3	4
10/09/15	3	3	2	2	1	1	4	3	2	1	3	4
11/09/15	3	3	4	0	1	3	2	2	3	2	2	1
12/09/15	1	2	2	1	1	4	3	2	3	2	1	2
13/09/15	3	1	0	1	0	3	0	3	2	1	2	3
14/09/15	4	2	2	5	0	1	6	2	3	2	3	3
15/09/15	4	1	2	4	1	2	4	1	4	4	2	4
16/09/15	1	1	5	4	5	1	5	1	3	3	3	3
17/09/15	0	0	3	4	5	4	4	2	1	1	6	3
18/09/15	3	0	3	4	4	4	3	2	4	3	1	2
19/09/15	3	0	2	3	2	3	2	2	3	2	0	2
20/09/15	2	0	2	2	3	1	2	3	3	3	1	0
21/09/15	3	3	4	3	4	4	2	2	4	2	2	2
22/09/15	1	4	4	4	4	1	3	1	2	3	7	2
23/09/15	0	4	5	4	1	3	2	3	2	0	0	0
24/09/15	2	2	3	3	4	4	2	4	1	5	2	3
25/09/15	1	6	4	1	5	2	2	4	2	4	3	2
26/09/15	2	3	4	0	2	5	2	2	4	2	4	2
27/09/15	2	3	2	0	1	4	5	2	2	3	0	3
28/09/15	2	3	5	3	0	2	6	4	2	2	2	2
29/09/15	1	3	3	6	1	2	3	1	3	4	3	5
30/09/15	2	2	2	3	6	2	0	2	2	3	3	3
01/10/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	57	72	88	80	78	80	89	72	87	76	86	80
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
01/09/15	3	5	4	6	3	2	2	5	4	2	5	0
02/09/15	6	1	3	3	3	3	2	1	2	4	3	1
03/09/15	3	6	1	4	4	2	2	1	3	2	1	1
04/09/15	3	4	4	6	3	1	2	1	4	0	1	1
05/09/15	1	3	4	1	4	1	1	3	1	1	1	0
06/09/15	2	2	1	1	4	1	1	4	0	2	1	1
07/09/15	2	5	1	2	1	1	2	1	3	0	2	0
08/09/15	3	1	4	5	3	2	3	3	2	5	4	0
09/09/15	3	2	4	1	2	2	2	1	2	0	2	0
10/09/15	4	4	7	3	3	3	0	4	2	2	2	1
11/09/15	4	1	5	6	0	2	1	3	6	0	1	0
12/09/15	4	4	2	2	0	0	3	0	0	2	1	0
13/09/15	3	1	3	2	2	0	3	2	0	1	0	0
14/09/15	2	5	4	2	0	2	2	2	4	1	3	0
15/09/15	0	2	5	6	4	2	1	1	4	3	3	0
16/09/15	3	1	3	7	3	3	2	2	1	2	5	2
17/09/15	0	4	6	3	1	6	4	2	1	2	1	1
18/09/15	2	0	3	2	3	3	2	3	0	1	2	1
19/09/15	3	3	2	1	4	3	2	0	0	3	1	0
20/09/15	3	2	5	1	0	2	1	1	3	1	1	0
21/09/15	2	3	4	2	1	3	2	4	1	6	1	0
22/09/15	1	5	4	3	3	1	2	2	4	2	4	0
23/09/15	0	5	4	7	3	1	2	4	4	2	3	0
24/09/15	2	3	4	3	2	2	1	3	5	2	2	0
25/09/15	1	2	3	5	4	2	0	2	3	2	2	0
26/09/15	1	6	4	2	0	0	1	2	1	3	2	0
27/09/15	4	3	3	2	1	1	0	3	1	2	1	0
28/09/15	2	2	5	2	1	1	2	3	2	3	0	0
29/09/15	3	3	4	4	6	1	3	2	1	4	2	0
30/09/15	2	2	6	5	4	3	1	2	5	0	2	1
01/10/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	72	90	112	99	72	56	52	67	69	60	59	10

REPORTING PERIOD: OCTOBER 2015

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	29	32	39	28	30	23	21	27	28	20	17	9
Bay 2	12	26	31	30	24	24	8	22	25	16	19	5
Bay 3	22	14	10	21	25	16	18	23	16	22	16	28
Bay 4	8	6	7	14	18	11	14	16	16	22	15	24
Total	71	78	87	93	97	74	61	88	85	80	67	66
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	33	36	29	29	19	18	21	25	16	17	2
Bay 2	12	27	39	21	18	9	6	9	19	10	6	0
Bay 3	11	19	22	18	15	18	17	17	19	17	15	2
Bay 4	12	15	18	17	16	5	8	14	9	13	15	3
Total	45	94	115	85	78	51	49	61	72	56	53	7

Traffic Movement Assessment Data

	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
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
01/10/15	2	6	0	7	5	1	1	2	5	3	1	5
02/10/15	1	2	4	4	4	3	0	3	2	3	4	4
03/10/15	1	2	2	4	4	2	2	5	3	2	0	2
04/10/15	1	1	0	2	2	1	0	3	2	3	1	2
05/10/15	0	1	6	3	1	1	0	3	6	1	2	1
06/10/15	6	6	2	2	1	4	4	2	5	1	1	1
07/10/15	4	4	4	5	2	0	5	4	3	2	4	3
08/10/15	2	2	3	4	3	2	2	1	2	3	2	2
09/10/15	4	4	1	2	4	4	1	6	2	2	4	4
10/10/15	1	2	3	0	6	3	1	2	3	2	3	2
11/10/15	2	2	0	2	2	2	2	4	2	2	1	3
12/10/15	1	3	6	2	1	3	1	5	4	5	1	1
13/10/15	2	3	2	3	4	2	1	2	2	3	3	3
14/10/15	4	3	3	6	1	2	3	3	1	4	4	2
15/10/15	3	4	2	4	3	2	5	0	1	4	1	3
16/10/15	1	3	4	5	6	5	2	1	3	4	3	2
17/10/15	1	2	2	1	4	4	1	4	3	3	1	4
18/10/15	1	2	1	1	3	1	2	2	3	1	3	1
19/10/15	2	2	4	1	3	1	1	2	3	3	2	0
20/10/15	1	2	4	5	3	2	1	2	1	1	3	1
21/10/15	2	3	2	2	3	5	7	1	1	2	3	1
22/10/15	3	2	4	6	1	2	2	2	5	2	1	3
23/10/15	3	2	2	4	5	2	2	3	5	4	1	3
24/10/15	1	3	2	0	3	3	3	3	2	4	3	2
25/10/15	1	2	3	0	1	4	1	2	2	2	2	2
26/10/15	4	3	3	3	6	0	2	5	1	5	1	2
27/10/15	5	1	3	3	3	1	1	5	6	1	2	2
28/10/15	3	1	4	5	2	2	1	5	1	3	5	2
29/10/15	2	2	3	3	4	4	2	2	1	0	3	2
30/10/15	6	2	4	3	4	2	3	2	4	2	2	1
31/10/15	1	1	4	1	3	4	2	2	1	3	0	0
Total	71	78	87	93	97	74	61	88	85	80	67	66
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
01/10/15	0	3	1	3	7	2	0	2	3	2	4	0
02/10/15	1	4	2	3	5	3	1	1	4	5	0	0
03/10/15	1	4	2	1	0	1	4	3	2	0	0	0
04/10/15	2	2	3	0	2	0	2	2	2	1	0	0
05/10/15	2	2	6	5	1	0	3	3	3	3	2	1
06/10/15	0	5	4	2	2	2	2	4	2	1	2	1
07/10/15	0	2	6	0	2	2	3	2	3	1	2	1
08/10/15	1	4	2	4	1	1	3	2	2	3	2	0
09/10/15	0	3	6	4	1	4	1	1	3	2	3	1
10/10/15	0	2	1	2	4	2	0	0	2	3	1	0
11/10/15	1	4	3	2	1	1	0	2	4	1	1	0
12/10/15	3	3	5	5	3	1	2	0	3	2	2	0
13/10/15	1	3	5	5	4	2	2	3	5	2	2	0
14/10/15	3	4	6	3	2	3	3	3	3	2	1	1
15/10/15	3	2	5	5	5	2	1	4	4	3	2	0
16/10/15	2	2	5	2	6	5	2	2	3	4	3	0
17/10/15	1	0	1	2	2	2	0	2	0	1	3	1
18/10/15	1	2	1	1	1	1	0	2	0	1	2	0
19/10/15	0	4	7	4	4	0	2	3	0	2	3	0
20/10/15	2	1	4	1	2	1	1	1	1	1	1	0
21/10/15	4	5	6	4	2	2	1	4	1	1	2	0
22/10/15	1	4	4	4	2	3	1	2	2	1	2	0
23/10/15	2	3	4	3	2	2	2	2	1	5	1	1
24/10/15	1	4	2	1	0	1	0	2	4	0	2	0
25/10/15	2	6	2	0	1	1	3	1	2	0	0	0
26/10/15	2	2	5	4	2	0	3	1	1	1	1	0
27/10/15	1	1	4	3	5	3	3	0	0	1	3	0
28/10/15	1	2	3	5	6	1	0	2	1	2	1	0
29/10/15	2	4	3	0	2	2	2	0	4	2	1	0
30/10/15	4	3	4	5	0	1	2	3	3	1	4	0
31/10/15	1	4	3	2	1	0	0	4	2	2	0	0
Total	45	94	115	85	78	51	49	61	72	56	53	7

REPORTING PERIOD: NOVEMBER 2015

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	26	37	36	27	23	19	30	31	28	14	11
Bay 2	5	22	25	23	25	21	15	18	25	17	15	9
Bay 3	18	15	12	21	25	18	15	15	19	19	19	17
Bay 4	9	13	6	12	16	12	8	13	10	15	14	12
Total	45	76	80	92	93	74	57	76	85	79	62	49
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	11	27	37	24	32	21	18	18	22	22	15	4
Bay 2	11	16	32	22	28	22	10	7	20	12	8	3
Bay 3	16	18	23	19	10	11	17	18	18	14	15	5
Bay 4	15	11	12	15	11	5	8	6	7	6	11	0
Total	53	72	104	80	81	59	53	49	67	54	49	12

Traffic Movement Assessment Data

	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
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
01/11/15	0	0	0	0	0	0	0	0	0	0	0	2
02/11/15	2	1	5	3	2	3	2	3	2	3	2	1
03/11/15	1	3	4	3	1	2	4	1	2	3	2	2
04/11/15	3	3	1	4	0	3	4	2	4	2	3	0
05/11/15	0	2	1	2	2	6	1	4	2	3	1	1
06/11/15	3	2	1	1	5	4	3	3	4	7	2	4
07/11/15	2	1	1	3	2	4	1	7	4	4	1	1
08/11/15	1	1	1	1	3	2	2	1	2	4	1	0
09/11/15	0	3	5	0	2	1	4	2	1	1	2	3
10/11/15	2	2	3	6	3	2	2	1	2	1	3	1
11/11/15	0	4	5	3	4	4	4	4	5	3	3	2
12/11/15	1	2	5	2	4	3	2	6	4	3	2	2
13/11/15	2	1	2	2	7	2	0	3	3	3	3	3
14/11/15	1	3	2	0	4	3	1	4	2	1	1	0
15/11/15	2	0	0	4	1	1	0	1	4	3	2	0
16/11/15	0	2	4	7	5	4	2	1	5	2	3	4
17/11/15	2	3	3	5	3	2	1	2	2	2	3	1
18/11/15	0	1	2	4	2	5	3	4	1	3	1	2
19/11/15	1	2	1	5	4	2	2	3	2	4	3	1
20/11/15	2	2	2	7	5	2	0	3	5	1	2	2
21/11/15	0	0	1	2	4	1	2	3	3	2	3	2
22/11/15	1	2	4	0	2	0	2	2	4	3	1	0
23/11/15	3	7	5	2	1	2	0	3	4	5	2	3
24/11/15	6	2	3	4	3	2	2	4	2	2	3	1
25/11/15	1	4	6	4	5	2	2	1	5	3	2	1
26/11/15	3	5	5	1	2	3	2	0	1	3	1	2
27/11/15	3	4	3	4	3	2	3	1	2	3	1	3
28/11/15	0	2	3	2	2	2	3	0	1	2	2	2
29/11/15	0	4	0	2	2	2	1	1	1	0	4	1
30/11/15	1	5	1	4	7	0	1	3	3	1	2	2
01/12/15	2	3	1	5	3	3	1	3	3	2	1	0
Total	45	76	80	92	93	74	57	76	85	79	62	49
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
01/11/15	1	4	2	2	0	1	2	1	3	1	0	0
02/11/15	4	3	3	2	3	0	3	1	3	3	0	0
03/11/15	0	4	3	6	1	1	2	4	1	1	2	0
04/11/15	0	1	2	3	4	2	1	0	1	0	1	1
05/11/15	1	2	0	1	2	0	1	0	2	0	1	1
06/11/15	2	0	2	3	0	4	4	0	1	2	1	2
07/11/15	3	3	1	0	3	0	0	0	4	1	2	0
08/11/15	4	2	1	1	2	1	1	0	1	2	3	0
09/11/15	1	6	5	2	2	1	1	2	5	2	2	0
10/11/15	3	3	5	4	5	3	0	2	3	4	3	1
11/11/15	0	2	3	2	6	2	5	2	4	2	3	1
12/11/15	3	1	6	2	4	3	2	1	1	2	3	1
13/11/15	1	3	3	2	4	3	2	3	4	0	0	1
14/11/15	2	2	2	2	0	2	0	2	0	1	2	0
15/11/15	3	1	1	1	2	3	1	0	2	0	2	0
16/11/15	1	2	5	6	5	1	2	2	3	2	2	0
17/11/15	0	2	5	3	4	3	3	5	4	3	1	0
18/11/15	5	1	4	3	4	2	2	3	1	2	1	2
19/11/15	3	3	3	4	4	3	3	4	2	2	2	0
20/11/15	3	5	3	3	1	2	5	0	1	4	1	1
21/11/15	0	1	5	2	3	2	1	2	2	2	2	0
22/11/15	2	1	7	2	1	1	0	3	3	2	0	1
23/11/15	0	5	6	5	0	4	2	4	1	2	2	0
24/11/15	1	3	4	5	1	4	1	2	2	4	3	0
25/11/15	1	3	7	5	5	2	3	1	4	3	2	0
26/11/15	3	3	5	2	2	4	1	1	1	1	4	0
27/11/15	1	5	2	2	5	1	0	1	4	1	1	0
28/11/15	0	1	2	2	2	2	1	2	2	1	1	0
29/11/15	1	0	2	0	3	0	0	0	1	2	2	0
30/11/15	4	0	5	3	3	2	4	1	1	2	0	0
01/12/15	0	0	0	0	0	0	0	0	0	0	0	0
Total	53	72	104	80	81	59	53	49	67	54	49	12



TRAFFIC MOVEMENT ASSESSMENT: DECEMBER 2015

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	18	25	28	30	27	25	15	20	26	26	20	12
Bay 2	14	18	26	21	28	22	18	15	22	27	15	12
Bay 3	14	13	15	4	12	12	15	12	10	18	12	23
Bay 4	7	6	3	9	7	3	7	3	7	9	13	14
Total	53	62	72	64	74	62	55	50	65	80	60	61
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 PM
Bay 1	22	28	35	22	24	20	19	19	21	18	16	5
Bay 2	15	20	33	23	25	19	8	15	10	16	9	4
Bay 3	18	16	18	6	9	12	7	7	9	6	10	4
Bay 4	11	9	8	5	0	1	3	4	0	4	2	0
Total	66	73	94	56	58	52	37	45	40	44	37	13

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
01/12/15	0	0	0	0	0	0	0	0	0	0	0	1
02/12/15	2	3	3	3	1	2	1	2	3	5	3	0
03/12/15	2	1	2	5	4	5	1	0	2	4	2	3
04/12/15	0	1	6	2	3	3	6	2	2	2	2	3
05/12/15	0	2	3	4	1	1	1	1	4	1	1	0
06/12/15	2	1	3	1	0	1	0	3	2	2	0	0
07/12/15	2	5	2	2	1	1	2	1	4	4	1	2
08/12/15	2	2	5	2	2	1	1	1	4	5	0	2
09/12/15	1	1	3	4	3	2	1	2	3	2	3	3
10/12/15	2	2	3	4	2	2	2	1	2	3	3	2
11/12/15	4	2	3	2	2	5	2	1	4	3	2	2
12/12/15	2	3	0	3	0	2	3	2	0	2	1	1
13/12/15	1	2	1	0	0	1	1	3	0	1	1	0
14/12/15	3	3	4	2	6	4	3	1	1	1	4	3
15/12/15	1	5	1	3	3	2	4	1	2	1	3	5
16/12/15	1	3	5	4	3	2	4	2	2	4	2	1
17/12/15	4	0	0	1	3	2	1	1	3	2	2	7
18/12/15	2	3	1	3	4	1	1	2	1	5	3	1
19/12/15	1	1	3	1	2	3	1	3	2	2	3	0
20/12/15	1	2	3	0	1	1	1	0	3	4	1	0
21/12/15	4	4	1	1	5	4	6	3	3	5	4	2
22/12/15	3	3	2	2	4	3	4	2	2	4	1	2
23/12/15	3	1	3	1	3	2	0	2	1	2	5	3
24/12/15	1	2	2	3	5	2	1	4	2	3	2	1
25/12/15	0	0	0	0	0	0	0	0	0	0	0	0
26/12/15	0	0	0	1	1	0	0	1	1	0	1	1
27/12/15	1	0	0	2	3	3	0	0	3	1	4	3
28/12/15	2	1	1	1	2	2	1	2	2	4	0	5
29/12/15	2	3	4	0	3	1	1	2	3	2	2	2
30/12/15	2	3	3	4	2	2	1	2	1	3	0	3
31/12/15	1	1	4	3	3	0	2	2	2	2	2	3
Total	52	60	71	64	72	60	52	49	64	79	58	61
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
01/12/15	0	4	3	5	1	3	1	0	2	1	1	0
02/12/15	4	3	4	2	2	4	2	0	4	1	1	0
03/12/15	2	3	3	3	2	5	2	0	0	6	5	0
04/12/15	1	3	4	3	5	4	2	3	1	3	3	0
05/12/15	2	0	4	2	0	0	2	0	3	1	0	0
06/12/15	4	3	5	0	0	0	0	3	2	0	1	0
07/12/15	2	4	4	1	3	0	2	2	2	1	2	1
08/12/15	2	2	5	1	4	4	1	0	2	2	2	0
09/12/15	2	1	1	1	2	4	0	3	2	3	1	2
10/12/15	3	3	2	1	4	1	1	4	1	2	2	2
11/12/15	2	4	3	4	1	0	2	0	0	2	0	0
12/12/15	3	0	4	0	0	0	1	1	0	0	1	1
13/12/15	3	3	2	0	2	1	2	1	1	1	1	0
14/12/15	3	3	3	2	2	2	0	0	5	2	0	0
15/12/15	1	5	3	1	2	2	1	2	0	2	0	0
16/12/15	2	3	2	5	0	3	3	2	1	0	1	2
17/12/15	1	3	4	1	2	4	1	1	2	2	0	0
18/12/15	1	1	2	0	3	5	0	2	0	4	2	0
19/12/15	1	2	3	3	2	0	0	2	2	0	0	1
20/12/15	2	0	2	0	1	0	2	0	0	0	3	0
21/12/15	3	2	6	4	3	0	2	4	1	2	1	1
22/12/15	3	4	5	2	1	2	3	4	3	2	2	1
23/12/15	6	3	4	5	2	0	1	2	1	1	1	0
24/12/15	0	2	1	1	1	0	0	1	0	0	0	0
25/12/15	0	0	0	0	0	0	0	0	0	0	0	0
26/12/15	1	0	0	0	3	0	1	0	1	1	1	0
27/12/15	3	2	0	1	2	2	2	0	0	2	1	1
28/12/15	3	1	2	1	2	1	1	3	2	0	2	0
29/12/15	2	2	4	3	2	2	0	1	1	1	1	0
30/12/15	3	5	3	2	3	2	0	2	0	2	1	0
31/12/15	1	2	6	2	1	1	2	2	1	0	1	1
Total	66	73	94	56	58	52	37	45	40	44	37	13

Appendix C

Incident Register

Appendix C Incident Register



ID	Case #	Date	Type	1.Incident Person 2.Reported By	Person Type	Dangerous	Site	Department	Status	Description
407	NEW 071	12/10/2014	Incident	1.Buysen, John 2.Buysen, John	Employee	No	NEWCASTLE		Completed	During discharge of product from the Tamiat Navigator at 13:40hrs, as pressure was increased a weep from a gland on a ball valve appeared. The discharge was stopped immediately and the weep assessed. The gear box wheel was removed from the ball valve and the gland tightened. The gear box wheel was replaced and discharge commenced at 14:10hrs. There was a delay of 30 minutes. The weep was contained with a bucket and spill pads.
408	NEW 072	12/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 12/10/14 at 17:45 hrs Macquarie valley fuels driver – Jeremy Hancock entered the terminal to load. Jeremy is not Authorised to load from the terminal unsupervised and Operations intervened to prevent Jeremy from loading. Upon inspection of this drivers loading status it was also noted that the driver also loaded unauthorised on 10/10/14 at 05:46 hrs The drivers responded that he was unaware of the terminal requirement for a load assessment to be conducted prior to unsupervised loading. The Terminal Manager was informed of this issue immediately, The driver has been locked out pending investigation.
409	NEW 073	12/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 12/10/14 at approximately 15:30 IOR driver Brett Howe reported to Operations that he had ran over and damaged 2 drain tins in load bay 3. Brett has been instructed to inform IOR management to replace the damaged trays. Replacement trays have been put in load bay 3 to continue operations.
411	New 074	13/10/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 13/10/14 at approximately 19:25 hrs during discharge of Tamiat Navigator emergency stop was given as a short strong storm blew over the wharf and the ship drifted approximately 2-3 metres off the berth the wharf hoses slipped in between the berth fenders and the ship. The Terminal Manager was initially called to be informed of what was known at that current point in time. Upon the Shore Officers (Nathan McCartney) arrival to the berth it was found that the ship had drifted back into the berth and had partially crushed the two wharf stringers, the wharf attendants were instructed to move to a safe location and Security was informed to contact VTIC and report the incident. When the shore officer reached the security hut a call was made to VTIC and a request for Tugs and a ships Pilot were made to stabilise the ship and prevent the wharf hoses being further damaged by ship movement. Once the ship was stabilised the hoses were drained and blown clear of product and disconnected from the ship. The hoses were then sent offsite to be hydrostatically tested

418	NEW 075	10/11/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	for integrity before any assessment can be made to recommence discharge On the 11/11/14 it was reported that a full set of skid marks were present from the truck waiting area of the terminal through load bay 4, upon investigation of the surveillance footage it was noted to be Walter Gardiner from the previous day loading at approximately 18:00 BOL 116625 from IOR transport. It appears that Walter had his trailer brakes locked up due to a lack of air and dragged his truck/ trailer to load bay 4 and loaded his A Trailer. Walter then proceeded to move his truck forward to load the B trailer and had further air issues could not load and exited the terminal.
420	NEW 076	23/11/2014	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	During Discharge of Stavanger Eagle at approximately 06:25 hrs 23/11/14 the Wharf attendants noticed a small weep on 6" hose no 981224, (these are new hoses) The ship was instructed to stop pumping. The hose was drained clear and disconnected from the ship prior to recommencement of discharge. The amount of product to ground was minor approx 10mls and was contained early. The remainder of the discharge will be completed on 1x 8" hose creating a delay of approximately 12hrs.
421	NEW077	24/11/2014	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	Upon dewatering tank NN5 and NN3 in unison, the tank low draw valve was left open on NN5. Product was introduced into the tundish and left to ultimately be drawn away to the dewater tank under suction. Due to low suction and a passing dead-man valve, the tundish overfilled and there was approximately 5-10 litres hit the ground. The area was boomed and spill rags were placed to contain/ absorb the spill.
422	NEW 078	23/11/2014	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 23/11/14 at approximately 19:25 during a electrical storm the newcastle Operations building experienced internet and server connectivity issues. The issues affected: T server access, S drive access, Email access, customer reporting and the Viva Sap interface this issue remained in effect until 25/11/14 11:16 hrs.
424	NEW079	03/12/2014	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	During the operation of the fuels manager system for inventory management purposes, the SAP export button was unintentionally pressed which lead to an error. This resulted in files from the fuels manager program being re-sent to the shell sap system, causing a duplicate of results influencing customer billing.
430		10/12/2014	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	While draining the bunds on Wednesday (10.12.14) due to consistent poor weather the Puraceptor overflow resulting in wastewater passing straight into the western drain. This could be the result of outfall flow being greater than the Puraceptor inlet capacity, or the level in the western drain being too high and generating backflow. To prevent this from happening again, only two bund will be drained at a time to ensure more control over the removal of bund water.
434		11/12/2014	Incident	1.Riding, Aaron	Employee	No	NEWCASTLE	Operations	Completed	On Thursday 11/12/2014 @ approx.

				2.Riding, Aaron						<p>06:00hrs a North Coast Petroleum driver had a spill in bay 2 of 10 litres from comp.3 when he removed the load arm. Upon investigation it was found that after he switch loaded he did not close his API on this compartment. After filling the comp. the API was still open, he closed the API as soon as the leak started to reduce the amount of product to ground. After he cleaned up the spill he called the on call number and reported it operation staff was notified and Terminal Manager and Site Operator were on site within 20 min to investigate the issue.</p>
435		06/01/2015	Near Miss	1., McCoskers Transport 2.Buxton, Liam Judd	Third Party	No	NEWCASTLE	Operations	Completed	<p>During daily stock reconciliation by Ncl staff, it was discovered a driver for McCosker's Fuel Haulage (MFH) loaded both front and back units only using the rear trailer's equipment card.</p> <p>The driver was able to load both units by completing the load on the front unit (using the rear trailers loading card) before moving to the rear.</p> <p>The driver has been "locked out" pending investigation, with the owner of MFH being notified.</p>
436		14/01/2015	Near Miss	1., J.L.Pierce 2.Duckmanton, Ryan Jon	Third Party	No	NEWCASTLE		Completed	<p>Driver loading in Bay 2 (equipment PF380/PS031/PS032) advised operations his rear trailer brakes were locked on and he was unable to move his vehicle.</p> <p>The carrier companies mechanic was called and investigated the issue. After review the mechanic advised he would be able to disengage the rear brakes enabling the vehicle to be removed off site without skull dragging the rear trailer.</p> <p>Method and tools to be used were agreed and mechanic permitted to performed required works.</p>
437		21/01/2015	Near Miss	1., McCoskers Transport 2.Riding, Aaron	Third Party	No	NEWCASTLE	Operations	Completed	<p>On the 21st January 2015 @ approx. 09:00 a McCosker fuel haulage truck (equipment group number NCL_MCO_08) arrived on site for a supervised load when it was noticed by operation staff, that the prime movers SLP had expired in December 2014. On further investigation the prime mover was in the system but not attached to an equipment group due to McCoskers not being mass managed, so it never came up with a warning at the gate and accuload. The driver was asked to remove the vehicle and get an updated SLP and return to service before returning to the Terminal for loading.</p>
441	NEW 086	06/02/2015	Incident	1.Riding, Aaron 2.Riding, Aaron	Employee	No	NEWCASTLE	Operations	Completed	<p>On Friday 6th February 2015 at approx. 08:00 whilst emptying the slops tank into a vacuum truck a spill of approximately 5 litres occurred in load bay 1 (a spill contained area) , Due to the slops truck being full and not having the required ullage to clear the hose. The vacuum valve automatically shuts on the vacuum truck when its full level is reached therefore the hose remained full. To clear the hose the dry drain system was used. The spill was cleaned up with spill pads.</p>

442	NEW085	05/02/2015	Near Miss	1. McCartney, Nathan 2. McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On 05/02/15 during Hazard rating inspections by contracted electricians it was found that in load bay 4 wiring rack had an exposed unlabelled wire. This was immediately reported to Operations. Upon investigation and testing the wire was found to be dead / redundant and ran into load bay 3 where the wire was also un terminated the wire was left in place during the construction process. The decision was then made to remove the redundant wiring.
443	NEW087	14/02/2015	Incident	1. Buxton, Liam Judd 2. Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	At approximately 2040 on the 14th of February 2015 during the discharge of a diesel receipt at Stolthaven Newcastle, the wharf attendant reported to the on duty shore officer the disconnection of the international shore connection; this resulted in the immediate stoppage of the product discharge. On assessment of the wharf and vessel it was noted by both the crew and wharf attendants that the shore connection was removed and stored (locked) by the Newcastle Port Services Officer. Only port services have access to this wharf box, therefore Port of Newcastle (PoN) was contacted to return to site and allow access so discharge could recommence. All wharf and security personnel were reinforced of the importance of the shore connection. Another safety meeting was conducted on board the Gan Tribute. Once the terminal checked all connections the discharge was recommenced at 2145. This resulted in an overall stoppage of approximately one hour. To ensure this will not happen again, it is importance for wharf users to understand the functionality and importance of the safety equipment/ protocols in place, as well as, having a spare connection available in the wharf shipping container.
444	NEW088	15/02/2015	Incident	1. Buxton, Liam Judd 2. Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	At approximately 2150 the wharf attended notified Stolthaven staff that there was an issue aboard the MT Gan Tribute and that the Master of the vessel required communication. Upon arrival to the vessel at 2200 the Master informed Stolthaven staff that the pump designated to the cargo tank 2 port was damaged could no longer be used for bulk transfer. Stolthaven requested further inspection which resulted in the chief officer accompaniment to the deck of the vessel. He (C/O) then detailed that the pump was damaged and that repairs could not be made whilst at port. Therefore the only way to discharge this cargo would be to transfer the remaining cargo into the neighbouring tank (2 Starboard) via a hydraulic line with suction pump being tied into an internal transfer cargo line. This would also require the opening of a hatch to obtain access to the cargo tank. After the internal transfer the product can be discharged by a different pump set to shore. The remaining ullage of 2 port equates to approximately 1,500 m3. The maximum transfer rate of the improvised transfer line is 100m3/h. This would result in a

										<p>stoppage of approximately 10-15 hours.</p> <p>The Stolthaven representative informed the Master of the vessel that there is to be no repair/ transfer works to be under taken during the transfer of the bulk product.</p> <p>At 2230 there was still enough product on board the vessel for ~ 11 hours pumping at full rate. The Stolthaven Terminal Manager was called and updated on the situation and initiated the escalation and approval process.</p> <p>16 Feb 09:04 - Harbour Master approval granted 09:48 - Discharge complete (excl 2P), awaiting approval to transfer 15:28 - Viva approval granted 17:21 - Transfer started</p> <p>17th Feb 08:00 - Transfer finished 09:30 - Discharge resumed ex 2S 12:30 - Discharge complete</p> <p>LOP issued for 23.3 hour delay.</p>
446	NEW089	15/02/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	<p>At approximately 1920 on the 15th of February 2015 the bulk discharge of Diesel from the MT Gan Tribute was stopped due to poor weather conditions; in agreement with the pre-discharge safety meeting. The wind speed was recorded at an average speed of 34 knots from a south westerly direction. Stolthaven staff requested the Chief Officer (C/O) aboard the vessel constantly monitor his weather gauging equipment and report when the average wind speed fell below 30 knots. At 1940 the C/O reported calming in weather conditions which allowed the recommencement of discharge. This totalled a 20 minute delay in bulk discharge procedures.</p>
447	NEW090	16/02/2015	Incident	1.Tankers, Hills 2.Buxton, Liam Judd	Third Party	No	NEWCASTLE		Completed	<p>At approximately 2230 on the 16th of February, a Hills driver reported to Stolthaven staff a faulty battery within the prime mover. This resulted in the inability of the truck to leave loading bay one.</p> <p>Bollards were placed behind the truck to signal an "out of service" bay. The driver contacted a local towing company (O'Neils) to come and remove the truck from the loading bay.</p> <p>The truck was successfully removed from the bay at 2350 and parked adjacent to the admin building to wait for a mechanic to re-install a new battery.</p>
448	NEW091	17/02/2015	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	<p>Statement of Facts in relation to low conductivity Tank NN5 after discharge Gan Trust</p> <ul style="list-style-type: none"> • 17/02/2015 16:00hrs Intertek advised Operations that tank NN5 had low conductivity once tested after discharge • 17/02/2015 16:00 hrs calls to James were placed to no avail. • 17/02/2015 16:09 Email was generated and sent to James explaining the low conductivity and current available volume on hand for truck loading

									<ul style="list-style-type: none">• 17/02/2015 18:02 hrs received a call from James and confirmed plans to rectify the following morning• 18/02/2015 05:59 hrs started receiving calls from drivers and was alerted to a stock shortage• 18/02/2015 07:00 hrs recirculation setup and recirc started 07:15hrs• 18/02/2015 07:30hrs Stadis 450 injected into recirculation system 15 lts• 18/02/2015 08:00 first sample taken Result low conductivity 22 pS/m• 18/02/2015 08:55 Second sample taken Result 133 pS/m• 18/02/2015 09:00 Return to truck loading operations and communicate information.	
457		12/03/2015	Incident	1.Riding, Aaron 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>During discharge of STI Aqua the Chief Officer requested a meeting with the Shore Officer. C/O advised he was having issues with maintaining the IG system as local Jelly fish were blocking his water intake system and requested he turn off the IG system as it was a Diesel only cargo. The request was denied and C/O advised to stop discharge if he could not maintain IG systems and wait for the Jelly fish to dissipate with tide.</p> <p>After review the Ship advised they could continue pumping with IG safely as the discharge was occurring at a reduced rate.</p>
462		24/03/2015	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	<p>On 24/03/15 Operations attempted to dewater tank NN5 and it was found that the line had no suction (Blocked line) Operations were attempting to clear the dewatering line from the dewatering tundishes using compressed air and 4 pin hole size leaks appeared and leaked to ground. The line was depressured and the leaks have temporarily had pipe clamps in place to stop the leaks, until weld repairs can be completed.</p>
463	NEW094	25/03/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	<p>On the 25th of March 2015 operations was conducting an internal tank transfer from tank NN7 to tank NN5. To accomplish the task a 3" flexi hose was needed to connect to the transfer line. At approximately 1300 it was noticed that there was a leak originating from one of the camlock fittings.</p> <p>The transfer was immediately stopped. The line was blown clear with an to remove any product and de-pressured. On removal of the camlock fitting approximately three litres of diesel went to ground.</p> <p>On further inspection, it was noticed that the o-ring residing in the camlock was damaged, which could have caused the leak. The o-ring was replaced and the transfer was recommenced; with no leak.</p>
464	NEW	26/03/2015	Incident	1.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	<p>Another pinhole leak has occurred</p>

	095			2.McCartney, Nathan						on the dewatering line near tank NN2, A pipe clamp has been attached.
469	New 097	13/04/2015	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	At 05:30 IOR driver Richard Davey activated loadbay 3 ESD button causing a terminal shutdown. This was rectified by terminal staff attending site. Upon asking the driver what happened he reported tripping over and falling on the ESD button. The driver has reported no personal injury when asked.
491		28/04/2015	Near Miss	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>During the discharge of the Alpine Marie, at approx. 10:30 the vessel drifted from the berth approx. 500 - 600mm. An emergency stop was called to stop pumping. A light weight shore rope broke (as designed) which holds the hoses away from the vessel. The Vessel was urgently requested to retighten all lines to bring back to the berth and the hoses were safely recalled.</p> <p>The Port of Newcastle had alerted an excessive amount of freshwater was in the harbour from a recent storm. This can cause berthed vessels to move/ be drawn with vessels passing. It had been agreed to stop discharge during the first shipping movement and review.</p> <p>No vessels had past the Alpine Marie during this time but a vessel from K3 further down the channel had departed which is believed to have caused the movement. Lines were tight prior to the incident and wind was not a main factor.</p> <p>At 11:30 pumping was stopped as a precaution for a vessel to berth at K4. As a result the Alpine Marie moved away from the berth by 2.0 meters. Shore crew were prepared for the movement and no damage was sustained. After discussion with the Harbour Master it was agreed the hoses were to be drained and stored ashore for a cluster of shipping movements due at 13:45. A delay of approx. 6 hour is expected in total.</p>
502		13/05/2015	Incident	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>Emergency Shut Down activated at site at approx. 03:00. Lowes Driver contacted on call staff member and advised he had accidentally pushed the ESD button instead of the deadman button.</p> <p>Staff member attended site to reset alarm and discuss incident with Driver. No other carriers were impacted during this period.</p>
504		21/05/2015	Incident	1.Duckmanton, Ryan Jon 2., MacInnes Transport	Employee	No	NEWCASTLE	Operations	Completed	<p>Emergency Shut Down activated at site at 04:44. MacInnes Driver contacted on call staff member and advised the driver he was training had accidentally pushed the ESD instead of the deadman. Staff member attended site to reset alarm and discuss incident with driver.</p> <p>Trainer driver advised he was having difficulty with draining this compartments with the site's drain dry system when the driver trainee hit the ESD, mistaking it for the deadman button.</p> <p>Camera footage was reviewed which confirmed the drivers statement. Two other carriers were impacted from the outage.</p>
505		21/05/2015	Incident	1.Duckmanton, Ryan	Employee	No	NEWCASTLE	Operations	Completed	A bag and black case was

				Jon 2.Duckmanton, Ryan Jon						discovered outside of the Newcastle office, leaning against the building. No person was in the immediate area of the equipment and no labelling could be seen on the case. Contractors from FORM1 were seen talking in the car park and questioned if the gear belong to them, which they confirmed.
506	NEW 102	21/05/2015	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	Contractors were counselled as to the importance of not leaving unknown/suspicious items in or near the Terminal. On 21/05/15 at approximately 08:14 Access Fuels driver Aaron Chant has reported a compartment overfill. Upon inspection it was found that: Equipment - CB22AV compartment 1 was overfilled and Diesel was spilled onto the loadbay floor and sump - approximately 60lts Upon inspection of the drivers loading BOL 128722, 2080Lts was pumped into a compartment 1 with a safe fill of 2610Lts. The spill was cleaned up and the equipment and driver have been locked out of the system pending investigation.
508	NEW 103	21/05/2015	Incident	1.Riding, Aaron 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	Access fuels driver Aaron Chant was found to be using his mobile phone onsite the driver was instructed to get off his phone immediately. This driver is currently locked out pending another investigation. Note, this breach occurred in the parking area outside of the gantry exit (still within the Terminal).
511	New 104	12/06/2015	Near Miss	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	On the 12/06/15 at approximately 11:10 hrs, Prime mover Rego BR99QV belonging to Hills Tankers was noticed to be uninducted to site and attempting to enter the load gantry. The driver was advised that the prime mover was not inspected / inducted to enter site and was instructed not to enter. An inspection of the prime mover was immediately carried out and the details imputed into the Fuels Manager system the prime mover was then granted access to the terminal.
513		18/06/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	Water test results from discharge point 5 indicated a failed result for Total Suspended Solids (TSS) and Oil and Grease (O/G). The results for these test are as follows: - 87 ppm for TSS, maximum reporting limit is 30 ppm - 16 mg/L for O/G, maximum reporting limit 10 mg/L The EPA was notified (ref C08247-2015) and investigation is underway for the origin of the contaminants. A licence trade waste transporter has been contacted for the removal of the contaminated water.
516		17/06/2015	Near Miss	1.Transport, Hopes 2., OneSteel	Third Party	No	Off Site One Steel gate house	Off site	Completed	Incident report received from our neighbouring facility, Onesteel, advising a Driver on-route to the Stothaven Terminal was using his mobile phone when passing the security gatehouse.

										From the information supplied, the carrier and driver were identified and contacted. Stolt requested an incident report and corrective actions.
521		21/06/2015	Incident	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	During the discharge of the Vinalines Galaxy, Stolthaven was advised by SNP security a crew member had not returned from shore leave. Crew member had left berth at 17:15 21/06/15 and curfew was 23:00. Police, Customs and Port of Newcastle was notified by SNP. Ship departed at 06:00 22/06/15, crew member was still not located at this time.
522		24/06/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	On the 24th June 2015 at approximately 2330 an IOR equipment set had an electrical fault while loading, which resulted in the vehicle being removed from the load bay by heavy haulage. The driver had completed loading trailer A and upon moving the vehicle forward he noticed the fault. Trailer B did not get loaded and the paperwork was generated by Stolthaven while the vehicle was being removed to be fixed.
531		08/07/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	On the 1st of July 2015 after a rainfall event; in compliance with the Stolthaven Newcastle EPL point 5 was sample and tested. Results were obtained on the 8th of July 2015, which indicated a failed result for Total Suspended Solids (TSS) and Oil and Grease (O/G). The results for these test are as follows: - 32 ppm for TSS, maximum reporting limit is 30 ppm - 14 mg/L for O/G, maximum reporting limit 10 mg/L Arrangements have been made to remove contaminated water by an licenced trade waste transporter.
533		07/07/2015	Incident	1.Haulage, East Coast 2.Duckmanton, Ryan Jon	Third Party	No	NEWCASTLE		Completed	It was observed on the site camera the driver (Dean Walker) in Bay 3 did not follow switch loading procedures (compartment draining) prior to loading. The driver was intervened before loading and questioned by the Site Manager. It was also observed the driver was wearing normal sunglasses instead of safety glasses.
535		10/07/2015	Incident	1.Riding, Aaron 2.Riding, Aaron	Employee	No	NEWCASTLE	Operations	Completed	On the 10 July 2015 at approximately 07:15 a leak was noticed originating from the pressure gauge on the delivery side of pump 17. The line was isolated and cleared of any product. On attempt to remove the fitting, the nipple sheared within the pipe fixture. Both isolation valves have been 'strong armed', and the pump has been electrically isolated and removed from duty to the load gantry. Handcock and Owen arrived on site and inspected the fitting to notice a crack within the nipple. We removed the leftover thread stuck in the pipe using an "easy out". a new 300kpa nipple was installed and the pump was de-isolated and reinstated to stand by pump on the scada system.
536		13/07/2015	Incident	1.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	At approximately 19:00 on the 13th

			2.Buxton, Liam Judd						July 2015 a minor leak was noticed originating from a hydraulic fitting at the inlet manifold. Upon inspection of the fitting it was observed that the o-ring that resides within the fitting was damaged. The whole fitting was replaced, which rectified the leak.
537	13/07/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	<p>During the discharge of the Nord Independence, at approximately 16:45, the Shore Officer was unable to make contact with the Wharf Attendant or Security via radio contact.</p> <p>The Shore Officer then called the IS phone, to find all wharf personnel did not have their radios at hand.</p> <p>They were then informed of the importance of having the radio on them at all times.</p> <p>At approximately 17:05 another call was placed across the radio to the wharf attendant who, again, did not respond.</p> <p>Multiple calls were placed across the radio, with the security answering.</p> <p>The wharf attendant was reminded, again, to have the radio on him at all times.</p> <p>The incident is to be followed up by the Site Manager.</p>
541	11/08/2015	Incident	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>During the Diesel discharge of vessel FPMC22, it was noted by the Wharf Attendant the bow of the vessel was drifting away from the berth. The Wharf Attendant called through an Emergency Stop to the vessel and discharged was ceased. Upon further inspection the vessel had moved away from the berth approx. 2 meters moving one of the discharge hoses across the water. The discharge hoses are connected from the shore manifold to the ship's manifold.</p> <p>As the vessel returned to the berth the middle of the discharged hose sagged between berth fender and ship and was crushed. The hose was safely recovered and drained, and removed. No Diesel was lost to ground or water during the incident.</p> <p>At the time of the incident a coal vessel was passing the FPMC22 which may have resulted in the vessel to be sucked from the berth. Wind data was reviewed, wind speed remained under 12 knots over the incident period. The site stop discharge limit is 30 knots.</p> <p>The Wharf Attendant confirmed the mooring lines were tight prior to the incident and the Shore Officer's last safety check was completed at 11:00 (35 mins prior to incident) in which the mooring lines were deemed satisfactory.</p> <p>The Port of Newcastle and Harbour Master were advised of the incident. EPA notified C10842#2015</p>
542	24/08/2015	Incident	1.Tankers, Hills 2.Riding, Aaron	Third Party	No	NEWCASTLE		Completed	As part of random camera footage checks it was noticed driver Craig Watson from Hills Tankers did not connect the truck correctly as per site procedure. The vapour hose

										was connected before the Scully and started loading. Switch loading was not completed on either the front or rear trailer.
546		30/08/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	<p>At approximately midday on the 30th August 2015 a Hills driver called the on-call number to inform Stolthaven that one of the printers in the drivers room had broken. Upon inspection from Stolthaven staff it was noticed that a sensor for the paper tray was damaged, which resulted in an error on the printer.</p> <p>The bypass paper feed was set as the default for a temporary fix. Viva was contacted to organise a technician to resolve the problem.</p>
547		31/08/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Completed	<p>At approximately 11:30, an IOR driver informed Stolthaven staff that there was a spill located at the entry gates of the terminal (Bay 4). Upon inspection, it was determined that there was approximately 2 litres of diesel on the ground.</p> <p>Spill pads and EnviroSorb were immediately deployed to clean up the area. An investigation is currently underway to determine the origination of the spill.</p>
548	NEW116	28/08/2015	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	<p>On the 28th August the Varec Gauging system started dropping in and out resulting in a loss of tank gauging and temperature levels as well as a loss of the automatic midnight reporting function to Viva and Glencore.</p>
554		06/09/2015	Incident	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>Pre-discharge Diesel samples from the Cabo Negro II showed signs of free water droplets on 10 of 13 tanks sampled. Diesel appeared clean and bright and small water droplets were also clear from what could be observed. Samples were obtained from the vessel tanks by "grab sample" method at approx. 12 meters. Surveyor's ullaging detected no water.</p> <p>Viva product quality team were contacted (Mark Tabone) and further samples were requested.</p> <p>Samples from 1W, 2W, 3W, 4W, 6W & S/P were retaken. Sample gear was flushed twice and dip tube wiped where possible. Samples still showed traces of water but less than previous samples.</p> <p>Surveyor further tested the above tanks by dipping with water finding paste and no traces of water was detected. Viva was contacted and advised of the results.</p> <p>Shore discharge orders were revised to enable more settling time after first tank fill.</p>
559		15/09/2015	Incident	1.Duckmanton, Ryan Jon 2.Duckmanton, Ryan Jon	Employee	No	NEWCASTLE	Operations	Completed	<p>Staff were notified by a driver, the main vehicle gate would not open for loading access. At the same time there were reports on loading issues in the load bays. Fuels Manager system was reviewed and appeared to have communication links down. Varec support was contacted and the system was rebooted, which corrected the issues.</p> <p>During this time paperwork was not generated correctly and had to be manually amended locally and with</p>

										customer Viva (SAP). Varec/Altasks were requested to review the incident and found the server had run out of available memory at the time of incident. The system is now being monitored in attempt to identify the cause of the high memory usage or need for additional memory capacity.
560		23/09/2015	Incident	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	NEWCASTLE	Operations	Completed	Upon recommissioning of the addative line the Pressure relief valve has failed and started leaking. This leak was immediately stopped and cleaned up and upon further inspection the Pressure relief valve has lost a seal which was the cause of the leak. The Pressure relief valve has been isolated and the system will be offline untill rectified.
563		04/10/2015	Incident	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	NEWCASTLE	Operations	Underway	At approximately 15:00 on Sunday (4 October 2015), Walter Gardiner from IOR reported that he had overfilled his compartment while loading. This resulted in product being introduced into the sites vapour line system. Upon further inspection it was noticed that residual diesel was leaking from the detonation arrestor within the loading bay (bay three). Excess product (approximately 5 litres) was drained from the vapour line, with spill trays placed up vapour connection points. Further monitoring is now underway to assess if the product leak has ceased.



ID	Case #	Date	1.Type 2.Category	1.Incident Person 2.Reported By	Person Type	Dangerous	1.Site 2.Department	Location	Status	1.Subject 2.Description
583		03/11/2015	1.Incident 2.	1.Buxton, Liam Judd 2.McCartney, Nathan	Employee	No	1.NEWCASTLE 2.Operations	Operations building	Completed	1.Safety 2.On the 3/11/15 at 07:00 hrs it was noticed that the Fire System Isolator was not de-isolated on the PM shift on the 2/11/15.
584		04/11/2015	1.Incident 2.People	1.Buxton, Liam Judd 2.Buxton, Liam Judd	Employee	No	1.NEWCASTLE 2.Operations	Terminal	Completed	1.Customer Complaint 2.At approximately 14:00 on the 4th of November 2015. A driver from Access Fuels came in to collect an equipment card for a new trailer set. There was a miscommunication between the driver and Stolthaven staff which result in the driver being quite aggravated. Once the issue was resolved the driver decided not load at the terminal and left the premises.
589		09/11/2015	1.Injury 2.Laceration	1., Hancock & Owen 2.McCartney, Nathan	Third Party	No	1.NEWCASTLE 2.Operations	Mayfield 4	Completed	1.Cut 2.On the 09/11/15 at approximately 10:30 at Mayfield 4 berth H&O contractor Neil Botham obtained an injury to his finger this occurred when the shipping hose was disconnected from the ship and being lowered on to the berth, and his finger became pinched between the hose flange and the hose trolley. After Neil removed his glove he decided to be treated at the local hospital and drove himself there for further assessment
590		16/11/2015	1.Incident 2.	1., J.L.Pierce 2.Riding, Aaron	Third Party	No	1.NEWCASTLE 2.Operations	load bay 1	Completed	1.Safety 2.At 7am this morning it was found that a driver from JLP had left the terminal with no paperwork for the load. After investigating it was found that the load No 140107 was a broken blend. The person on call did not receive a phone call and the driver left the terminal with an unreleased product and no paperwork for the load.
599		27/11/2015	1.Incident 2.Equipment	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	1.NEWCASTLE 2.Operations	Firepump No2	Completed	1.Equipment Fail 2.During Monthly fire pump checks completed by form 1 it was reported that fire pump No 2 has a blown head gasket, This is the second time this has occurred to this particular pump in approximately a 2 year period. A report will be supplied by Form 1 and circulated once completed. Jeff Hibbert has been notified and will take the matter up with BKB In the interim until a repair or replacement option is sourced the fire pump has been taken offline to prevent any further damage. and all site operations are aware of this
604	New	25/11/2015	1.Incident 2.Property damage	1.Nichol, Brad 2.Nichol, Brad	Employee	No	1.NEWCASTLE 2.Operations	Car Park	Completed	1.Supplier 2.Stolthaven employee's vehicles were found to have been exposed to paint over spray which had originated from the Tank construction.
611		15/12/2015	1.Incident 2.Equipment	1.McCartney, Nathan 2.McCartney, Nathan	Employee	No	1.NEWCASTLE 2.Operations	Mayfield 4 Wharf	Completed	1.Equipment Fail 2.At approximately 08:10 - 15/12/15 A H&O contractor

									<p>commenced Setup at the Mayfield 4 wharf for an incoming ship, he reported that one of the sites 8 inch shipping hoses has been ran over by a truck and is unserviceable. Investigation is underway.</p> <p>Not hose was in an empty state and blanked off at each end.</p>
612	15/12/2015	1.Incident 2.Contamination - Incoming	1.Riding, Aaron 2.Riding, Aaron	Employee	No	1.NEWCASTLE 2.Operations	Oriental Ruby/Mayfield 4 Berth	Completed	<p>1.Incoming Product</p> <p>2.Vessel Oriental Ruby planned for discharge at Stolthaven Newcastle. All ships tanks were sampled and released by Intertek prior to discharge. 23:06 started discharge, 23:10 first sample taken at wharf, sample failed on Haze (Haze 6). Sample appears grey in colour. Discharge was resampled again at 23:20 and failed again on haze, same appearance. Shore Officer was contacted and discharge was stopped.</p> <p>Cargo customer was contacted and advised of PQ issue. Stolthaven awaiting further instruction.</p>
613	16/12/2015	1.Injury 2.Laceration	1.Nichol, Brad 2.Nichol, Brad	Employee	No	1.NEWCASTLE 2.Operations	Test Room	Completed	<p>1.Cut</p> <p>2.Whilst cleaning a glass vessel a chemist from Intertek cut their thumb.</p> <p>The chemist proceeded to the Operations Office to report the injury.</p> <p>First Aid was administered - wound cleaned and Band Aid applied.</p>

Appendix D

Pipeline Integrity Test Report

Appendix D Pipeline Integrity Test Report

Hancock & Owen Services Pty Ltd



PIPELINE PRESSURE TEST CERTIFICATE		
Customer Site: Stolthaven		Certificate No. HO071115

Project Name: Wharf Line	System:
Flow Medium: Diesel	Location: Newcastle
Site Drawing No. (s) :	

Piping Code: ASME B31.3	Design Temp.: 0-40deg C
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Test Medium: Diesel	Test Pressure: 1500 kPa		
Test Duration: 1 hour	Start	3.00 pm	Finish 4.00pm
Test Date: 7/11/2015	Testing Officer Russell Hancock		
ISO No.	LINE No.		

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	Completed By	Approved By	Accepted By
Company	Hancock & Owen		
Name	Russell Hancock		
Signature			
Date	11/11/15		