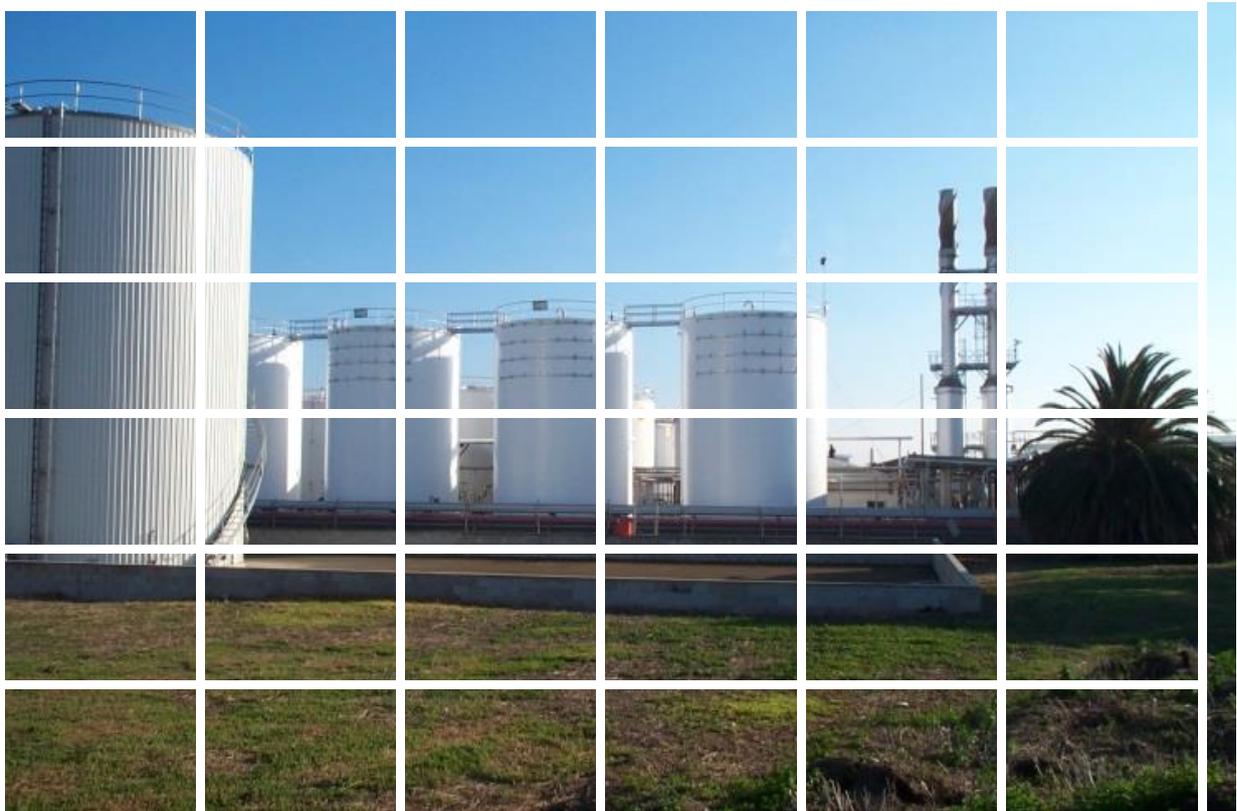


Annual Community Report

West Melbourne Site July 2017 – Dec 2018.



HSEQ-RPT-2019-28

Rev 0



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Executive Summary

This reporting period significant improvements were made in relation to HSE, however there was a significant spill of aluminium sulphate.

The key points to the performance were:

- Tank 49 spill in November 2017
- No lost time injuries
- One medical treatment injury
- No community complaints
- 12 WorkSafe improvement notices (e.g. contractor management)
- There were 3 loss of containment incidents over 200 litres.
- Waste was significantly higher than previous years largely associated with the Tank 49 spill
- Greenhouse gas emissions were steady

Improvements during 17/18 were:

- Development of HSE plan
- Commencement of elements relating to the revised HSEQ management standards
- Implementation of a an improved PTW system implemented
- Development and implementation of numerous Standard Operating Procedures (SOPs)
- Improved Emergency Response Plan
- Commitment to implementing a LMS program to assist in tracking training matrices and information
- Upgrade program to level measurement and protection levels
- Substantially more comprehensive safety case and control measure assessment



1 CHANGES TO SITE

Overall the site was very stable during 2017/18 with no major changes to operational requirements, plants or products held on site other than the improvements identified in Section 7.



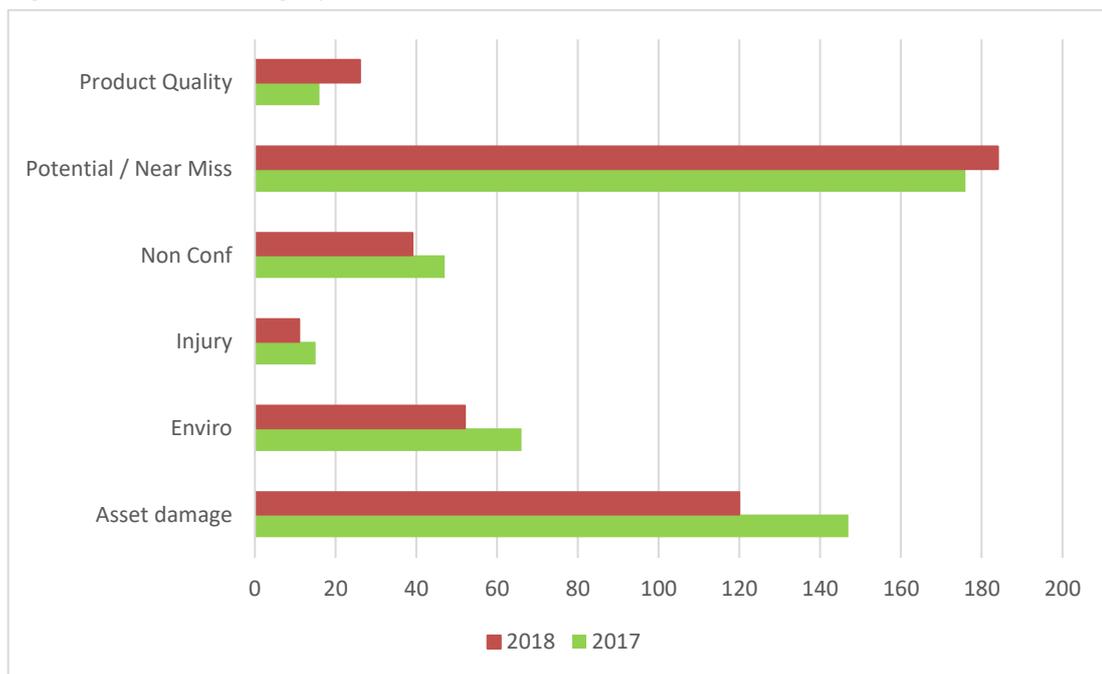
2 SAFETY / ENVIRONMENT PERFORMANCE

2.1 Incident Overview

This report has been prepared to provide a summary of the environmental performance at the West Melbourne Terminal over the period 1st July 2017 to 30th June 2018 as well as to trend that performance.

There were 54 incidents raised during the reporting period which were broken down in the following categories:

Figure 1 Incident Category Breakdown



An ongoing focus of incident reporting particularly on Potential / Near miss has seen an ongoing increase in the reporting of this category. This has resulted in an increase in actions being allocated through Integrum, and therefore more hazards being controlled and a safer workplace. The business will continue this focus as the standards of HSE continually improve within the organisation.

2.2 Safety Performance

At West Melbourne in the reporting period of July 2017 – December 2018:

- There was 1 Medical Treatment injury that required stitches to a finger. This was reported to the Worksafe Regulator.
- There were no Prohibition notices issued during this period
- There were 12 Worksafe improvement notices
- There were no Major Hazard Incidents during this period.



2.3 Safety Case

The West Melbourne Safety Case was completed in 2017 and was a major revision to provide a more comprehensive assessment and to improve the form of the safety case for ongoing use.

A total of 66 improvement opportunities were raised the Safety Case team.

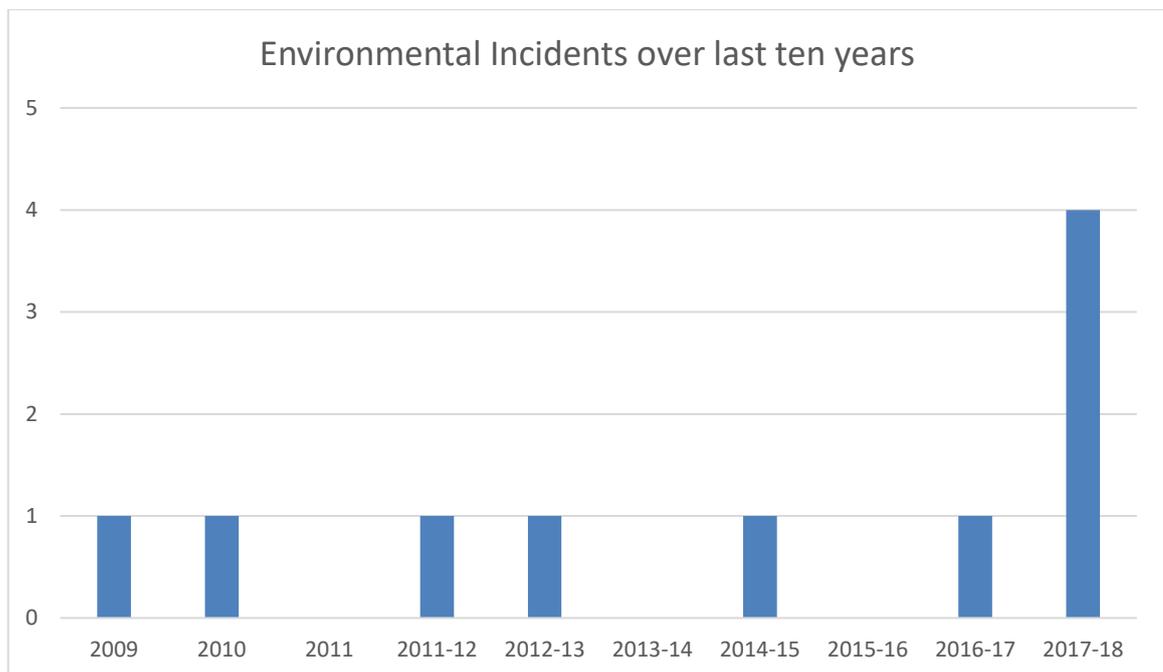
A new licence was issued for a period of 5 years with two conditions attached. These related to:

- Performance monitoring and auditing
- Covering independent high-level switch implementation (raised during the safety case development), tank design and relief device set pressure verification, and critical operating parameters.

2.4 Environmental Performance and Complaints

Historical trend of environmental incidents is detailed below. These are defined as spills greater than 200 litres, EPA reportable incidents (i.e. cause or likely to cause an offsite discharge or odour), licence breaches and EPA infringement actions.

Figure 2 Environmental Incident History



The 4 incidents this year relate to 3 loss of containment incidents and a failure to submit the annual return on time.



2.4.1 Loss of Containment

During 2017-18 the following spills were identified:

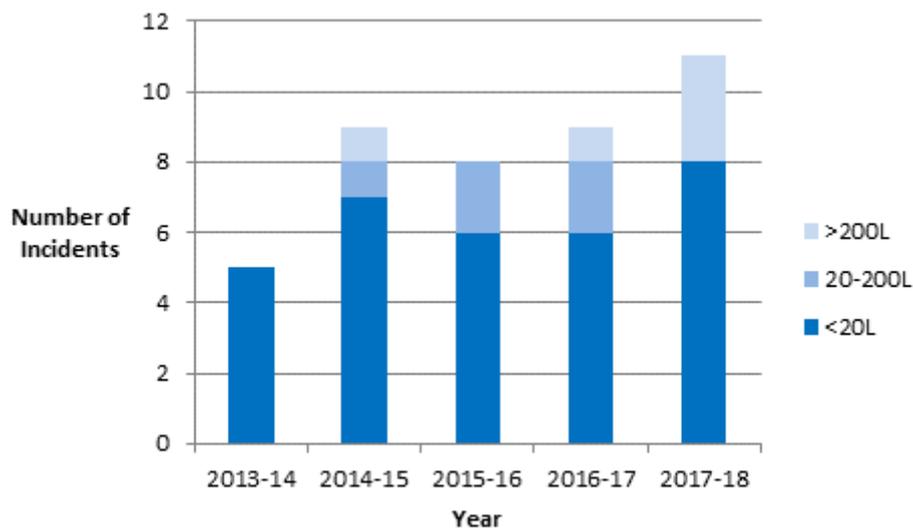
Spill Size	Number
>200 litres	3
20-200 litres	0
<20 litres	8

There were three significant loss of containment events in the reporting period (i.e. a loss of containment involving more than 200 litres):

- Tank 49 loss of containment in November 2017.
- Overfill of combustible liquid from portable slops tank.
- Spill of methanol from truck due to faulty tanker

The loss of containment trend for the site is shown below of the last 5 years.

Figure 3 Loss of Containment – 5-year trend



2.5 Community complaints

There were no odour or community complaints during the 2017/18 period. There have been no community complaints for the last 10 years.



3 EPA WASTE DISCHARGES

3.1 Air Emissions

3.1.1 Criteria

The EPA licence condition L1-DA1 states:

“Discharge of waste to air must be in accordance with the 'Discharge to Air' Table”

Table 1 EPA Licence - Discharge Limits

Indicator	Limit Type	Unit	Discharge Limits
Benzene	Bubble	to/yr	0.45
Butyl Acrylate	Bubble	to/yr	0.065
Carbon Monoxide	Bubble	to/yr	1.1
Methyl Methacrylate	Bubble	to/yr	0.2
Oxides of Nitrogen (as NO₂)	Bubble	to/yr	3.5
Oxides of Sulfur (as SO₂)	Bubble	to/yr	1
Phenol	Bubble	to/yr	0.006
Remaining VOC	Bubble	to/yr	8.4
Toluene- 2-4 diisocyanate and toluene 2-6	Bubble	to/yr	0.001

Condition L1_DA1.12 of the licence also requires that:

Air emissions from All Air Discharge Points must not exceed:

- a) 36 grams per minute of Benzene
- b) 11 grams per minute of Butyl Acrylate
- c) 40 grams per minute of Carbon monoxide
- d) 11 grams per minute of Methyl Methacrylate
- e) 240 grams per minute of Oxides of nitrogen (as NO₂)
- f) 70 grams per minute of Oxides of sulphur (as SO₂)
- g) 0.3 grams per minute of Phenol
- h) 370 grams per minute Remaining VOC
- i) 0.015 grams per minute of Toluene-2,4 diisocyanate and toluene-2-6-diisocyanate (TDI).



3.1.2 Monitoring Methodology

The emissions of all chemicals classed as Volatile Organic Compounds are determined using estimation calculations. A VOC includes any chemical compound based on carbon with a vapour pressure of at least 0.01kPa at 25°C as per EPA Publication 929.

These emission estimates are based on API 42 software calculations as a function of storage tank dimensions, chemical physical properties, and tank container filling quantities, duration in the tank and emission treatment effectiveness.

3.1.3 Air Emission Monitoring

The air monitoring program was complied with as detailed in the Environmental Management Plan.

The analysing of air emission discharge points during this reporting period found no non-compliances.

The 2017/18 year was compliant with EPA licence conditions relating to maximum annual discharge limits as shown in Table 2. Air emissions have been compliant for the last five years.

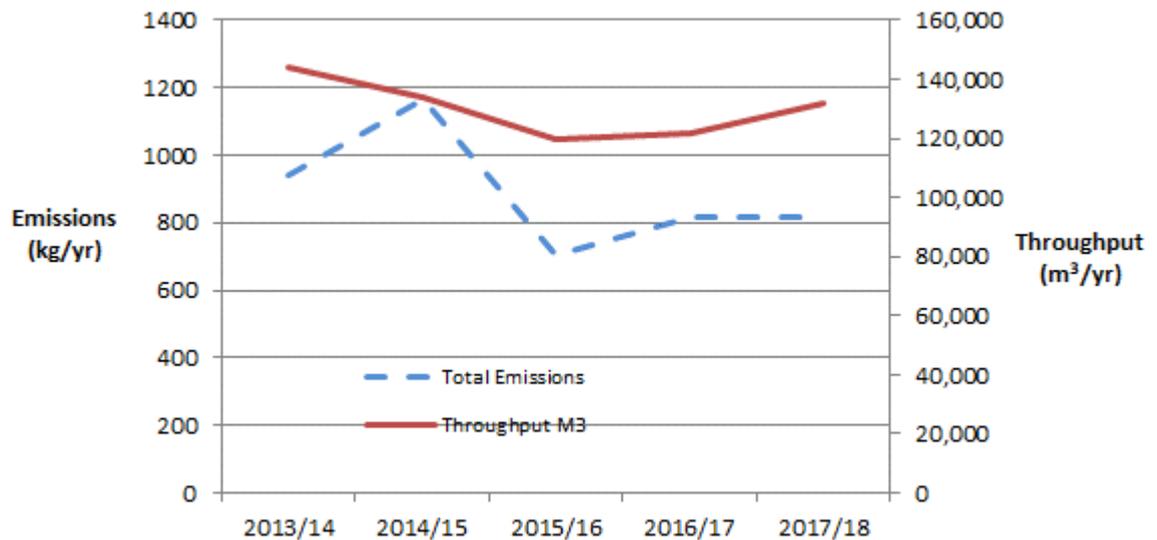
Table 2 Licence Air Emission Compliance Table

	Licence Limit	2017-18	2016-17	2015-16	2014-15	2013-14	Compliant
Benzene	450	2	2	1.6	5.1	8.6	Yes
Butyl Acrylate	65	0.6	0.5	1.6	3.3	3.4	Yes
Methyl Methacrylate	200	0	0	3.1	10.1	12.6	Yes
Phenol	6	0	0	0	0	0.6	Yes
Toluene- 2-4 diisocyanate and toluene 2-6	0.3	0	0	0	0	0	Yes
Remaining VOC	8,400	814	814	611	1045.5	914	Yes
Carbon Monoxide	1,100	306	386	355	416	362	Yes
Oxides of Nitrogen (as NO₂)	3,500	2165	2730	2513	2943	2564	Yes
Oxides of Sulfur (as SO₂)	1,000	14	17	16	19	16	Yes

A five-year trend is provided in terms of total emissions and throughput is shown in Figure 4.



Figure 4 VOC Emission Trends



3.1.4 Benchmarking / Best Practice

The UK Department of Environment, Food and Rural Affairs (DEFRA) produces a number of best practice process and sector guidance notes for a range of industries and industrial processes. This includes Process Guidance Note 1/13¹.

Process guidance Note 1/13 includes a requirement to reduce the total annual loss of petrol resulting from loading and storage of each terminal installation to below a target reference value of 0.01% w/w of throughput.

In addition, the total annual loss of petrol resulting from the loading and unloading of tankers must be below a target reference value of 0.005% w/w of throughput.

While a terminal handling a broad range of chemicals is hard to compare to a fuel terminal these figures are used in the absence of better data.

Table 3 Emissions as a function of throughput

Year	Total emissions (kg)	Throughput (cubic metres)	Ratio (w/w%)
2013-2014	939	144,150	0.00076
2014-2015	1164	128,458	0.00097
2015-2016	616	119,462	0.00061
2016-2017	814	121,600	0.00079
2017-2018	814	131,700	0.00073

¹ "Secretary of State's Guidance for Storage, Unloading and Loading of Petrol at Terminals", Department of Environment Food and Rural Affairs, Process Guidance Note 1/13, September 2004.



Note: SG=0.85 used for total throughput mass.

At 0.00082% the West Melbourne facility complies with this best practice objective.

3.2 Surface water (Stormwater) discharge

3.2.1 Performance Criteria

The EPA licence states:

“Stormwater discharged from the premises must not be contaminated with waste”

Surface water discharges must be controlled and discharged in accordance with the objectives of the State Environment Protection Policy (Waters of Victoria)

The targets currently used are those specified within the Environment Management Plan.

3.2.2 Assessment Methodology

The surface water monitoring program is designed to detect potential impacts from discharges associated with stormwater contaminated by chemicals associated with spills or leaks in tank bunds, tanker loading bays and general area.

Stormwater is now released according to a risk-based monitoring plan, as required by EPA Victoria.

All water that has the potential to be contaminated is collected within bunds and tested prior to release. The testing required prior to release are:

- Appearance (e.g. no visible floating oil, scum and objectionable material)
- pH
- Turbidity

3.2.3 Monitoring Results

The monitoring results are provided in terms of summary of all releases with minimum, average and maximum values as presented in Table 4.

Table 4 Stormwater Release Testing Results

	Investigation Level	Compliance Level	Average	Minimum	Maximum
pH	6.5 – 9.0	6.0 -9.5	7.5	6	9
Turbidity	40	50	16.1	1.4	49.8
Appearance	Clear from floating scum., oil etc		No failures		

All criteria meet specification however the turbidity can be at the high end. This is because of the clay base on the liner (i.e. bentonite in geotextile fabric). These are expected to decline as the new liner in Plant B settles down.

Higher pH can occur and this has been determined to be caused by the liner itself (possible the lime content).



4 GROUNDWATER MANAGEMENT

4.1 Performance Criteria

The EPA licence states:

“You must not contaminate land or groundwater”

This condition aims to ensure that the storage and use of materials and wastes at your site do not have a negative impact on the beneficial uses of the land or groundwater.

Determination of contamination is made with reference to the background quality and potential beneficial use of the land and groundwater. Tables 1 and 2 in SEPP (Prevention and Management of Contaminated Land) and Table 2 in SEPP (Groundwaters of Victoria) identify the beneficial uses that must be protected and the standards for their protection.

4.2 Assessment Methodology

The aim and purpose of the on-going monitoring assessment of the West Side facility is to provide information on the potential impact of identified contaminants of concern in the groundwater, derived from the use of the Site as a product storage facility.

The purpose of the groundwater monitoring program is also to observe trends in groundwater quality over time to identify whether changes in the monitoring plan are required.

The current bore network comprises 65 monitoring locations including offsite wells (Port Melbourne Area and River foreshore)

As there had been no formal review of groundwater monitoring since 2001, Environmental Strategies were contracted to develop a risk-based monitoring program. Over this time, there has been further remediation works, improvements in infrastructure and site management and groundwater impacts have significantly decreased. The purpose of this review was to:

- Assess available groundwater monitoring results
- Review current site infrastructure and practices
- Review the analytes to be tested in view of currently available tests and current inventory of chemicals
- Review the location and frequency of the testing
- Make recommendations as to future monitoring program.

The outcome of this review was that:

- All wells should be gauged on an annual basis.
- Wells in the vicinity of PSH impacts should be gauged on a six-monthly basis. It was noted that this should be reviewed annually on the basis of results.
- Ten wells between the site and the Maribyrnong River should be sampled on an annual basis, and analysed for:
 - Volatile Organic Carbons (VOCs)
 - Total Recoverable Hydrocarbons (TRH)
 - Alcohols
 - Acrylates
 - Phthalates



- Should there be an uncontained release, the need for additional monitoring should be assessed on a case by case basis.

It is noted that the number of wells sampled was increased from 10 to 11.

In addition, the following additional sampling was conducted:

- Dissolved and total aluminium
- PFAS

These were additional requirements requested by Terminals as part of the ongoing need to assess the impact from the Aluminium Sulphate spill in November 2017 and to identify the possible impact of fire-fighting foams (specifically PFAS/PFOS).

Note:

- Additional monitoring rounds were conducted to assess ongoing suitability of the air sparge curtain and to assess the impact of the Aluminium Sulphate spill.

4.3 Results

The following represent the results from the 2017/18 monitoring event.

4.3.1 Gauging / Phase Separated Hydrocarbons (PSH)

During the 6-monthly gauging round no light non-aqueous phase liquid (LNAPL) was observed. During the annual monitoring one well (PRT06) was noted with potential product from the surface.

This shows consistent improvement and 6 monthly gauging is no longer required.

4.3.2 VOCs, Alcohols, Acrylates, Phthalates and other MAH

Except for the analytes listed below all VOCs, Alcohols, Acrylates, Phthalates and MAHs other than BTEX were not detected.

- Isopropylbenzene was identified in W5A at a concentration below the adopted guidelines for human health. This concentration is within range previously observed for isopropylbenzene.
- N-propylbenzene was identified in W5A at a concentration below adopted guidelines. N-propylbenzene was not on the analytical suite for W5A in previous monitoring events.
- dichloroethane was identified in W22S at concentrations below the adopted guidelines for human health. This concentration is within range previously observed values in W22S
- Cis-1,2-dichloroethene was identified in W19S at a concentration below adopted guidelines. This is within the range of previously observed values in W19S.
- Carbon disulphide identified in RF5C and W5A at concentrations below adopted guidelines. Carbon disulphide was previously not detected in W5A and was found in a higher concentration than the previous detection in RF5C from the 2017 GME. It is noted that carbon disulphide has not been stored at this facility.



4.3.3 Total Recoverable Hydrocarbon (TRH)

Concentration of TRH were identified in seven of the eleven wells sampled. Only minor concentrations of the C15-C28 fraction were found in six of these wells while concentrations of all TRH fractions were found in W5A. None of these concentrations exceeded the adopted guidelines.

These concentrations represent the first detections of TRH in recent years for MWM01, RF5C, Ci-55 and W24Sa. Given these wells are widely dispersed (with same fraction) and the TRH detection at or near the limits of reporting, they may be due to laboratory error or minor cross contamination.

TRH concentrations in other wells were found to be within historically observed ranges except for C₆-C₁₀ fraction for W5A which had increased since the previous GME.

4.3.4 BTEX

The annual groundwater monitoring event in 2018 only detected BTEX in well W22S. These concentrations were found to exceed the adopted guidelines for primary contact recreational use but not for protection of ecological communities. Benzene concentrations had decreased since December 2017 inferred to be due to groundwater abstraction. Concentrations were within historically observed values.

The annual GME is about potential offsite impacts.

An onsite analysis was conducted to assess the level of natural attenuation over time. Ultimately this was to assess potential for remediation to avoid upgrades the air sparge system to assure long term reliability.

By the end of 2018 it was decided to wait until the 2019 groundwater event to assess the aluminium sulphate remediation efforts and to ensure sufficient information was available to make a decision relating to active remediation. This was based on observations of reduction in benzene in some wells where sulphate levels were high due to the spill.

4.3.5 Acrylates and Alcohols

Concentrations of all acrylates and alcohols were below the laboratory PQLs.

4.3.6 Phthalates

Concentrations of Phthalates were below PQLs.

4.3.7 Aluminium

Aluminium sampling commenced soon after the spill was cleared from the storage compound with high aluminium concentrations detected. A remediation plan was developed and put forward to the EPA for approval to proceed. This was implemented with the intent to agglomerate the aluminium to take it out of solution.

Concentrations of aluminium were found to exceed adopted guidelines for maintenance of ecosystems at all locations sampled during the annual groundwater monitoring event. Adopted guidelines for agricultural and recreational uses were not exceeded for any of these wells.

Aluminium concentrations were generally higher adjacent to Plant B, consistent with the release at this location. Aluminium concentrations adjacent to Plant C may be reflective of background concentrations although the cause of the high concentrations in well CI-55 has not been identified. In view of groundwater contours, it is unlikely the impacted



groundwater has migrated from Plant B to Plant C. This may reflect background levels associated fill material used in the past.

An ecological risk assessment was conducted by external consultants (I.e. Arcadis) in September 2018 concluded the overall risk profile for the river is considered low based on the data at that time.

4.3.8 PFAS

PFAS was detected in all wells sampled with concentrations generally higher in wells near plant B as opposed to Plant C. Concentrations of PFOS were found to exceed the adopted guidelines for both 95% and 99% protection in all wells sampled and exceeded recreational water criteria in all wells except RF5C. PFOA concentrations were found to exceed the adopted guidelines for 99% protection in W22S and exceeded recreational criteria in CI-14, W22S and S22Sa. PFHxA exceeded recreational criteria in all wells except RF5C.

PFAS results after a Total Oxidiser Precursor (TOP) assay were similar to pre-assay results. This may indicate an older spill where precursors have transformed to non-degradable components.

4.4 Summary

In summary the risks to human health and the environment from groundwater were assessed to be low and consistent with historical investigations except for PFAS, benzene and aluminium. It was assessed that the site is suitable for the current land use.



5 ENERGY EFFICIENCY AND GREEN HOUSE GASES

5.1 Performance Criteria

The overall objective is to minimise greenhouse gases and maximise energy efficiency as far as reasonably practicable.

5.2 Assessment Methodology

Our management approach is based on the EPA Protocol for Environment Management – Greenhouse Gas Emissions and Energy Efficiency in Industry – Publication 824. This protocol provides guidance for businesses on the SEPP (AQM) and its requirements for the management of greenhouse gas emissions and energy consumption.

The requirements are dependent on energy used in terms of gigajoules per annum or tonnes equivalent CO₂ per annum. As energy use increases the requirements are more stringent.

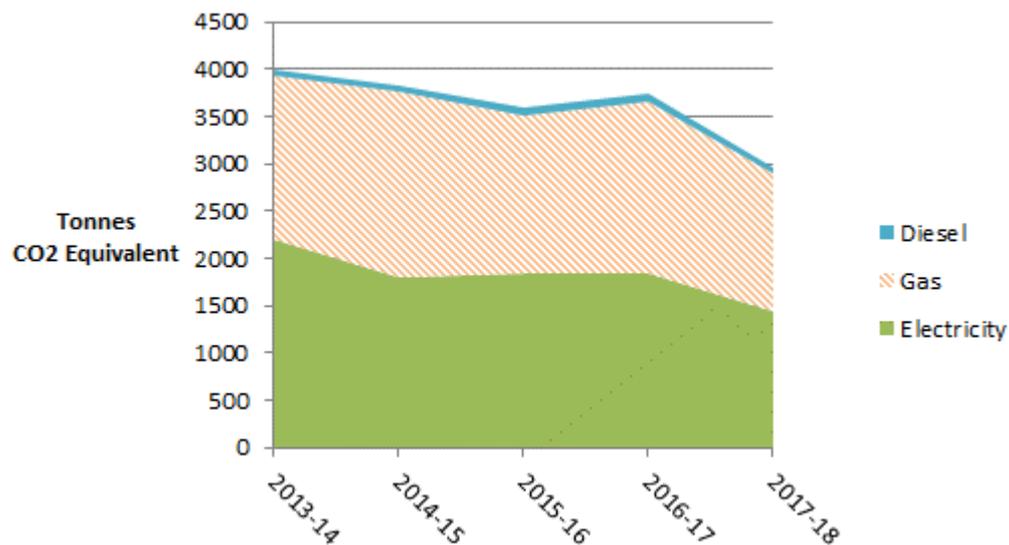
For the purpose of estimating greenhouse gas emissions emission factors were applied to energy inputs (i.e. gas and electricity). The emissions factors were obtained from the 'National Greenhouse Emission Factors' guide produced by the Department of the Environment (Australian Government). Electricity and gas usage is based on invoiced meter readings. Diesel use is small and is estimated.

The current year uses the 2014 greenhouse emission factors.

5.3 Greenhouse Gas Emissions

Greenhouse gas emissions are graphed below in equivalent tonnes of CO₂ emissions. These greenhouse gases are primarily associated with gas and electricity and diesel onsite. The trend over the last 5 years as well as the contribution of each of these sources is presented in Figure 5.

Figure 5 GHG Emissions (tonnes CO₂ Equivalent)





In the current year natural gas represented 46% of greenhouse emissions and electricity 51%.

Greenhouse gas emissions are generated primarily from:

- Combustor treatment units (2)
- Natural gas boiler/hot water heater (2)
- Electricity for pumps / fans /utilities and diesel for firewater pumps and vehicles.

The facility is mature with limited potential for growth and avenues for energy reduction have largely been exhausted by previous energy audits and energy reduction projects. This is reflected in the steady greenhouse gas emissions over the last 5 years.

Energy usage analysis is complicated by the conflicting influences including tank utilisation, throughput, type of chemicals (i.e. those requiring heating) and energy improvement projects.

Changes affecting greenhouse emissions within this timeframe are:

Year	Activity Influencing Greenhouse emissions
2013/17	No changes of note.
2017/18	Second combustor was not used for a significant portion of the year due to refractory failure resulting in lower gas usage.

5.4 Energy Efficiency

As described in Section 5.2 there is a requirement to assess energy efficiency with more detailed assessments being required with increasing energy usage.

A level two energy audit was undertaken on 21st October 2003 by ERM. The energy assessment was undertaken as part of the Victorian EPA Protocol for Environmental Management (PEM) requirements.

The recommendations for this audit have been implemented apart from minimising night time duty for the combustor while no transfers. This was not done due to safety concerns of restarting the combustor on demand. This is again to be reviewed for the 2016/17 period.

On completion of these recommendations there is minimal opportunity for further energy reduction.

Solar power has been considered and will be implemented in future as priorities allow.



6 WASTE MANAGEMENT

6.1 Performance Criteria

Waste management performance is assessed against the following criteria:

- Waste is to be minimised by assessing opportunities to reduce waste at source according to the hierarchy of waste control
- Waste must not be released to environment.
- All regulated waste will be transported by a licenced contractor to a licenced facility permitted to accept such waste.
- No contamination of soil, air or water as a result of inappropriate waste management.

The Environment Protection (Industrial Waste Resource) Regulations 2009 provide a decision framework within which industry must assess and implement practicable opportunities to avoid, reduce, reuse or recycle their wastes and avoid disposal to landfill. Where an opportunity to avoid or reduce the generation of prescribed industrial waste is practicably accessible, it must be implemented.

6.2 Liquid Waste

A total of 1117 tonnes of prescribed liquid waste was generated, consisting of:

- Slopping of product – ship unloading
- Line cleaning
- LOC
- Cleaning of tanks

Of that waste 100 tonnes were treated by the combustor.

Table 5 Liquid Waste

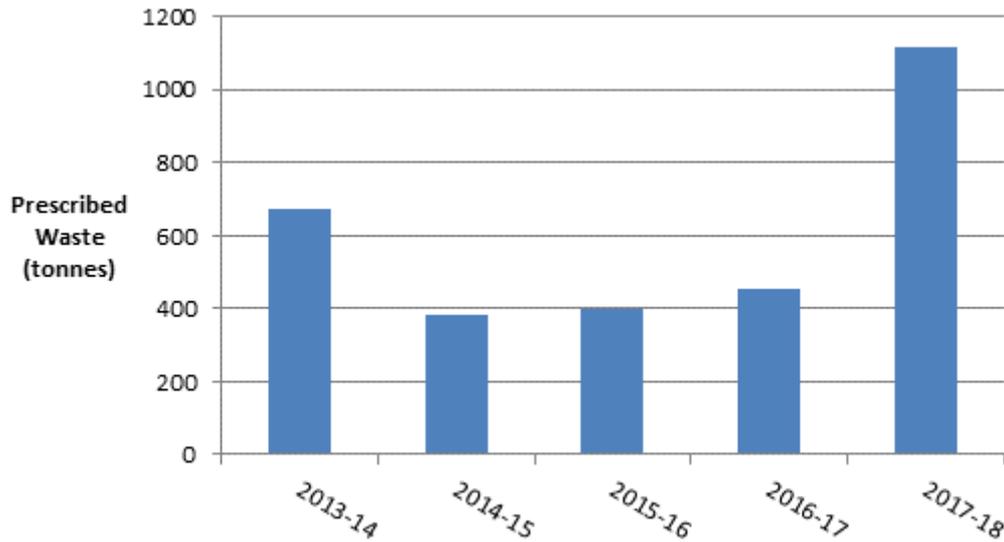
	2013-14	2014-15	2015-16	2016-17	2017-18
Tank & line washings (solvents) –LF120	72	5	111	97	
Flammable hydrocarbons (LG-100)					388
Tank and line washing (flammable) – LL150				63	169
Acidic waste (Alum)					544
Other	10				11
Waste sent to combustor	592 ¹	380	290	294	100
Total	674	385	401	454	1117

Notes:

1. Estimate based on flammable aqueous waste treated by the combustor at 4 lpm x 60 mins x 5 hours average per day x 250 working days per year.



Figure 6 Prescribed Waste Generation



The level of waste depends on the throughput (no. of ships arriving), types of product being stored and the sequence in which ships arrive. The number of tanks that are cleaned as part of the Asset Integrity Program also impacts.

As can be seen from the trend in Figure 6 the level of waste generated in this reporting period has increased due to the LOC incident at Tank 49.

6.3 Solid Waste

The total waste transported off site in 2017-18 was 4.8 tonnes. This is consistent with previous years and represents a minimum waste level. Three years running now the Solid Waste transported off site has reduced.

The breakdown of this waste into components with comparison to previous years is tabulated below.

Table 6 Prescribed Solid Waste

	2013-14	2014-15	2015-16	2016-17	2017-18
Foam pigs, rags (N 250)	4.4	5.4	3.0	5.4	4.8
Ship Sampling Waste (N100)			0.4		
Sand blasting grit (T160)	5.4		0.5		
Activated carbon (N210)			8.0		
TOTAL	9.8	5.4	11.9	5.4	4.8



7 ENVIRONMENT IMPROVEMENT

7.1 Improvement Program

HSE improvement activities are driven through the development of an Environmental Improvement Plan (EIP) and the setting of annual performance objectives. This forms the HSE Improvement Plan for the period (HSEIP).

The objective of this HSEIP is to provide a long-term vehicle to drive continual improvement of site environmental management and safety. The objective is to minimise environmental impacts and ensure a safe facility.

7.2 Performance

The overall status of the improvement plan is described below:

Aspect	Activity	Status
General	Implement radar gauging / level switches on all tanks – Phase 1. This will reduce risk of overfill of tanks	Complete
	Application of revised incident management database to better analyse environmental / safety incidents	Complete
Emergency Management	Replace Emergency Response Plan with new format and upgrade functionality and useability new improved plan	Complete
Air Discharge	Increase focus on recording combustor trips / diversions. While there had always been effective emission control this focus was to improve overall reliability.	Complete
Water Quality	Increase spill containment of gantry pits to ensure they do not overflow in the event of deluge	Feasibility assessment complete
	Increase spill containment at Plant C to ensure it complies with AS1940:2017 (latest version)	Complete
Groundwater	Undertake groundwater assessment for PFAS (fire-fighting foams)	Complete
	Install gas detectors in all flammable liquid compounds to detect earlier any loss of containment from a storage tank	Complete
	Re-instate T49 compound and upgrade integrity	Scope preparation underway by consultant GHD



	Upgrade air sparge system to ensure long term viability	Scope report complete – decision cannot be made until overall approach to contamination is completed.
Waste	Generate revised Waste Management Plan	Deferred to 2019
Training	Update Induction program with enhance environmental coverage	Induction presentation drafted
Environment management	Update EMP to include references to relevant preventive routines, more detailed documents / plans	Complete
	Prepare environmental obligations register	Complete
	Update EMS documentation to reflect revised ISO14001 requirements	Complete – ISO accreditation achieved.
Procedures	Update critical standard operating procedures to emphasis critical aspects as identified during Safety Case	Complete
	Completely review all main operating procedures and put into format that highlights main issues and is based on human factors principles	Complete
Process Safety	Undertake surge analysis for shipping to assess vulnerability	Complete
	Implement a critical controls register within the maintenance management system	Complete
	Implement incident recording structure within Incident Management System to allow statistical analysis of critical control failures and activation	Complete
Risk	Develop new occupational health and safety register for the site	Complete
	Develop new occupational health and safety register for the site	Complete



8 AUDIT PROGRAM

The audit program for West Melbourne consists of:

1. Annual internal environmental audit
2. Biennial external audit by an EPA accredited auditor
3. Lloyds ISO 14001 accreditation audits

8.1 Internal Audit

An internal EMS audit is carried out annually in accordance with Terminal's audit program. In 2017/18 this was carried out in September 2017.

The facility has been well maintained and housekeeping is at a high level.

Recommendation	Status
New Recommendations	
Conduct a review of WM aspects register	Complete
Add PM for 6-month review of environmental aspects register	Complete
Complete obligations register for WM environmental hazards	Complete
Update West Melbourne EMP to ensure regulatory references are current	Complete
Add obligations from lease to EMP	Complete
Update EMP to include linkages to MEX and other documents	Complete
Ensure that recommended actions on contractor reports are managed appropriately	Complete
Develop an Air Quality Management Plan as a sub-plan to the EMP	Planned for completion in Q2 of 2019
Provide improved combustor temperature report	Planned for completion in Q2 of 2019
Update Form WMT-FOR-801 to match release criteria in EMP	Complete
Increase Plant C compound capacity	Complete
Upgrade spill containment for gantries	Project initiated
Develop detailed waste management plan to support plan in EMP	Planned for completion in Q2 of 2019
Previous Recommendations	
Complete obligations register (environmental)	Complete



Recommendation	Status
While no odour complaints are being received due to the controls in place, we have not formalised boundary inspections with odour as an issue. This should be implemented to be pro-active in this regard.	Not complete

8.2 External Audit – EPA accredited Auditor

For the West Melbourne site an external audit was carried out by Frank Fleer of Golders Associates with a report issued in 2015. Prior audit was conducted in 2012.

Mr. Fleer is an industrial facilities environmental auditor, appointed pursuant to the provisions of the Environment Protection Act 1970.

8.2.1 Objectives

The objectives of the audit were to:

- Assess whether risks to the environment were being adequately managed
- Assess whether regulatory requirements relating to the preparation of Annual Performance Statements are being complied with.

8.2.2 Scope

The scope of the West Melbourne Terminal Environmental Audit was to:

- Assess the requirements of EPAV Licence No. 11058 and the Terminals West Melbourne Environmental Management Manual (EMM) and the Environment Improvement Plan (EIP)
- Assess relevant industry codes of practice or best practice environmental management guidelines
- Identify environmental hazards that have inappropriate or inadequate management systems in place.

8.2.3 Audit Findings

The report concluded that in general management procedures associated with waste generation, process discharges to surface waters and process emissions to air were appropriate with relatively minor amendments.

A total of 22 action items have been raised. 20 have been completed.

The final action is to review the Waste Management Plan.

8.3 Lloyds EMS Audit

A re-accreditation audit was last completed in September 2017 and a surveillance audit completed in September 2017 and May 2018. No non-conformances were identified however several opportunities for improvement was raised:



Recommendation	Status
New Recommendations	
Rectify drift in MEX priority backlog	Complete
Provide MEX work order traceability for 10-year inspections	Complete
Ensure 5 yearly refresher training is up-to-date	Complete
LQRA recommend customer audits be scheduled	Rejected - these audits are not routine and impossible to schedule
Annual contractor review required	Complete
2018 MOD forms need final reviews by National Ops Manager	Complete – modified system through integrum now in place
Hose register at WM could be reviewed	Complete
pH buffers and turbidity standards should be replaced (Past expiry date)	Complete
Review pH data transcription to ensure accuracy	Complete – requirements clarified

All recommendations have been completed.

8.4 WorkSafe Victoria

There were 12 improvement notices arising out site audits. They were:

- Contractor management
- Permit to Work
- Emergency response exercises
- Fire system isolation procedures – control during fire service provider checks
- Foam system work instructions
- Foam system – control of concentration
- Locked valve control (register)
- SMS audits
- Work permits
- Lock out tag out
- Bunding compliance with AS1940 – Tank 48
- Maintenance management

All improvement notices have been closed out.