Annual Environmental Management Report - Banksmeadow Transfer Terminal 2018-2019

Quality Information

Prepared by	Reviewed by	Authorised by
P.P.	.....	.....
Constance Georgiou Graduate Environmental Engineer *BSc Geol (Hons), GradCert EEM*	Sara Maddison Operations Project Manager *BE(Civ), BE(Env)*	Bob Manevski Facilities Manager Banksmeadow / Port Botany
	& ..... Ramona Bachu SHEQ Systems & Assurance Manager *BSc, GradDip, MEEM, DipPM, MEIANZ*	

Address: Veolia Australia and New Zealand
Corner Unwin and Shirley streets,
Rosehill, NSW 2142

Status: FINAL

Document Revision Register:

Rev	Revision Details	Issued to	Date
1	Draft for internal review	• Veolia NSW Resource Recovery Team • Veolia NSW SHEQ Team	May 2019
1	Final	• NSW Department of Planning and Environment • NSW Environment Protection Authority	June 2019

Contents

Quality Information 2

Contents 3

Terms and Definitions 5

Executive Summary 6

Section 1 - Introduction 7

1.1 Site Background 7

1.2 Legislative Requirements 7

1.3 Responsibilities 8

Section 2 - Environmental Monitoring & Management 9

2.1 Terminal Monitoring Requirements 9

2.1.1 Meteorology 10

2.2 Air Quality 13

2.2.1 Dust 13

2.2.2 Odour 14

2.3 Water Monitoring 15

2.3.1 Groundwater Monitoring 15

2.3.2 Surface Water Monitoring 17

2.3.3 Leachate Monitoring 20

2.4 Noise and Vibration 21

2.4.1 Noise and Vibration Monitoring 21

2.4.2 Vibration Monitoring 21

2.5 Traffic 22

2.6 Waste 23

2.6.1 Waste Volume Monitoring 23

2.6.2 Waste Recording 25

2.7 Pests and Vermin 25

Section 3 - Environmental Performance **27**

3.1 Previous Findings and Voluntary Improvements 27

3.2 Current Findings and Voluntary Improvements 29

3.3 Complaints 30

3.4 Conclusion 30

References **32**

Appendices **33**

Appendix A - Site Plan 33

Appendix B - Pest Control Reports 34

Appendix C - Complaints Register 35

Terms and Definitions

Term	Definition
AEMR	Annual Environmental Management Report
ALS	Australian Laboratory Services PTY LTD
BMS	Veolia's Business Management Systems
BTT	Banksmeadow Transfer Terminal
DA	Development Application
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EP&A	Environmental Planning and Assessment (Act and Regulations)
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
IEA	Independent Environmental Audit
OEMP	Operational Environmental Management Plan
TOU	The Odour Unit
The Consent	Development Consent SSD 5585
TOU	The Odour Unit PTY LTD
The Terminal	Banksmeadow Transfer Terminal
The Vault	Veolia's incident and compliance management system
TPA	Tonnes per annum
Veolia	Veolia Australia and New Zealand
WMP	Waste Management Plan

Executive Summary

This Annual Environmental Management Report (AEMR) 2018-2019 is the 4th report prepared to detail the environmental performance of the Banksmeadow Transfer Terminal (the Terminal), owned and operated by Veolia Australia and New Zealand (Veolia). This AEMR covers the period of 29 April 2018 to 28 April 2019 (2018-2019 reporting period).

Veolia has prepared this AEMR in accordance with Schedule 4, Condition 8 of the Development Consent SSD 5585 (the Consent), as well as relevant legislative requirements and industry best practices.

This AEMR provides a summary of environmental monitoring conducted at the Terminal, if any non-compliances or other findings have been identified against the Consent during the 2018-2019 reporting period, and the corrective actions assigned.

No non-compliances were identified against the Conditions of Consent (Consent Conditions) during this reporting period. Further details are provided in Section 3.2 of this AEMR.

Section 1 - Introduction

1.1 Site Background

The Terminal is located at 14 Beauchamp Road and 34-36 McPherson Street, Banksmeadow and is identified as Lots: A & B, DP 366725 and Lot 1, DP 435497 owned by Keith Engineering (34-36 McPherson Street); and part of Lot 2, DP 100686 (14 Beauchamp Road) owned by Asciano (Pacific National). A site layout and location plan is provided in **Appendix A**.

The Terminal was granted approval under Section 89E of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 28 April 2015 as a State Significant Development, and is approved under the Consent to receive up to 500,000 tonnes per annum (TPA) of waste from the Sydney Metropolitan Area, in accordance with the Environment Protection Licence (EPL).

Banksmeadow Waste Transfer Terminal commenced operations in September 2016, accepting putrescible waste from the Sydney Metropolitan Area, which is containerised and loaded onto rail wagons for transportation to the Woodlawn Eco Project Site (owned and operated by Veolia) in the Southern Tablelands (approximately 250 kilometres southwest of Sydney) for treatment, recycling and energy recovery. During this reporting period, the Terminal received a total of 312,078 tonnes per annum (TPA) of putrescible and non-putrescible waste, and had approximately 156 truck movements per day.

1.2 Legislative Requirements

The main legislative instruments governing the environmental performance and activities undertaken at the Terminal include the *EP&A Act* regulated by the Department of Planning & Environment (DPE), and the *Protection of the Environment Operations Act 1997* (POEO Act) regulated by the Environment Protection Authority (EPA), as well as their respective associated regulations.

In addition to the Consent, the Terminal operates under the Environment Protection Licence 20581 (EPL).

Consent Conditions stipulate the requirements that need to be addressed to maintain compliance at the Terminal, and those relevant to the preparation of this AEMR are provided in Table 1.1.

Table 1.1 - Consent Conditions for the preparation of this reporting period's AEMR

Relevant Condition	Requirement
SCHEDULE 4 - ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	
Annual Review	
8	Within one (1) year of the date of this consent, and every year thereafter, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. This review must: (a) Describe the development that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year; (b) Include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, which includes a comparison of these results against; • The relevant statutory requirements, limits or performance measures/criteria • The monitoring results of previous years; and • The relevant predictions in the EIS; (c) Identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) Identify any trends in the monitoring data over the life of the development (e) Identify any discrepancies between predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and (f) Describe what measures will be implemented over the current calendar year to improve the environmental performance of the development.

1.3 Responsibilities

- Environmental monitoring during the operational stage of the Terminal was undertaken and/or supervised by NSW Resource Recovery technical support personnel - Constance Georgiou (Graduate Environmental Engineer) and Sara Maddison (Operations Project Manager).
- Analyses of samples were performed at a NATA accredited laboratory, Australian Laboratory Services PTY LTD (ALS).
- The Odour Unit PTY LTD (TOU) was appointed to conduct odour audits for the Terminal.

- The Independent Environmental Audit (IEA) was conducted by Jackson Environment and Planning PTY LTD, with the audit team consisting of Dr Mark Jackson, Rylan Loemker and Alan Parsons.

Section 2 - Environmental Monitoring & Management

2.1 Terminal Monitoring Requirements

The following sections detail the monitoring undertaken throughout the reporting period in accordance with the Environmental Monitoring Program as detailed within the Operational Environmental Management Plan (OEMP).

The Environmental Monitoring Program provides details on all monitoring requirements of the Consent and other appropriate regulations to measure and assess the continuing suitability, adequacy and effectiveness of on-site environmental management measures.

Table 2.1 summarises the environmental monitoring conducted at the Terminal as per the Environmental Monitoring Program.

Table 2.1 - Operational Monitoring Requirements

Condition Reference	Type of Monitoring	Frequency	Commentary
Schedule 3 Conditions 36, 38, 40, 41	Meteorological Monitoring	As required	Ongoing basis
Air Quality Management Plan (AQMP)	Meteorological Monitoring - Wind	As required	Ongoing basis
Schedule 3 Condition 36	Visual Dust Monitoring	Daily or as required	Ongoing basis
AQMP	Odour - Site Inspections	Daily or as required	Ongoing basis
Schedule 3 Condition 34	Odour Audits	Six monthly	Condition satisfied, monitoring conducted on: 11 October 2018 10 April 2019

Soil, Water and Leachate Management Plan (SWLMP) / EPL	Stormwater Discharge Monitoring	Daily during any discharge	Ongoing
Schedule 3 Condition 10	Groundwater Monitoring	Six monthly	Condition satisfied, monitoring conducted on: 29 November 2018 21 March 2019
Schedule 3 Condition 10	Leachate Monitoring	As required	Non/Not triggered
Schedule 3 Condition 27	Waste Volume Monitoring	Daily	Ongoing basis
Schedule 3 Condition 27	Traffic Monitoring	Daily	Ongoing basis
Schedule 3 Condition 27	Traffic Spot Monitoring	As required	Ongoing basis
Noise & Vibration Management Plan (VNMP)	Operational Noise Monitoring	Six months from commencement of operations	Condition satisfied, monitoring conducted on: 9 & 10 August 2017
Schedule 3 Condition 38	Site Inspection and Housekeeping	Weekly	Ongoing basis
Schedule 3 Condition 21	Pest and Vermin Checks	Quarterly	Ongoing basis

2.1.1 Meteorology

Monitoring meteorological data during this reporting period provided an understanding of the ambient air (such as dust and odour) and rainfall conditions at the Terminal, which was utilized to manage environmental performance, as well as investigate potential impact to nearby sensitive receivers.

Meteorological data is downloaded from the public weather station situated at the Bureau of Meteorology (BoM) Sydney Airport site (Station ID:066037), provided in recorded at 15 minute

intervals. During this reporting period, meteorological conditions such as wind speed, wind direction and rainfall were monitored on an ongoing basis and/or when any odour complaints were received.

Wind speed and wind direction data was used to investigate and respond to odour complaints in this reporting period (refer to Section 3.3) by determining the source and spread of potential odours travelling off-site, if generated from the Terminal.

A summary of daily wind speeds and wind directions at 9AM and 3PM at the nearby BoM weather station is presented in Figures 2.1 and 2.2.

During this reporting period, between 9AM and 3PM the prevailing wind directions were north-westerly and south - south westerly, with wind speeds most frequently between 11 and 20 m/s.

Figure 2.1 - Wind direction data for 9AM & 3PM for this reporting period

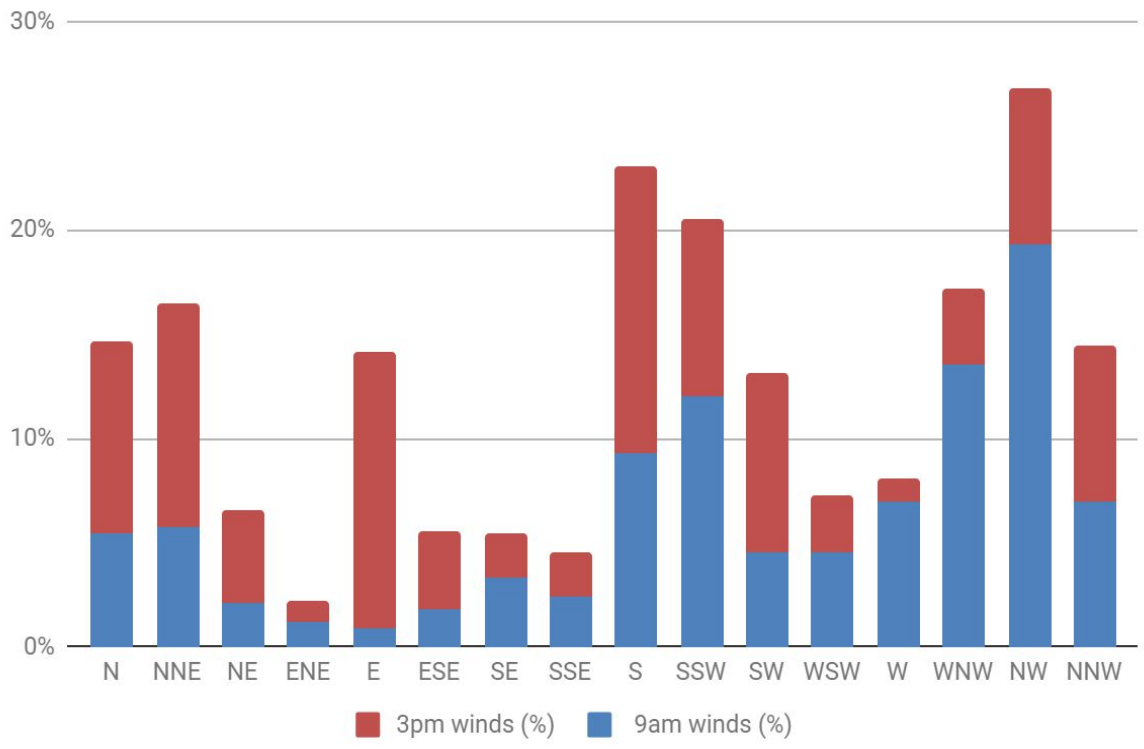
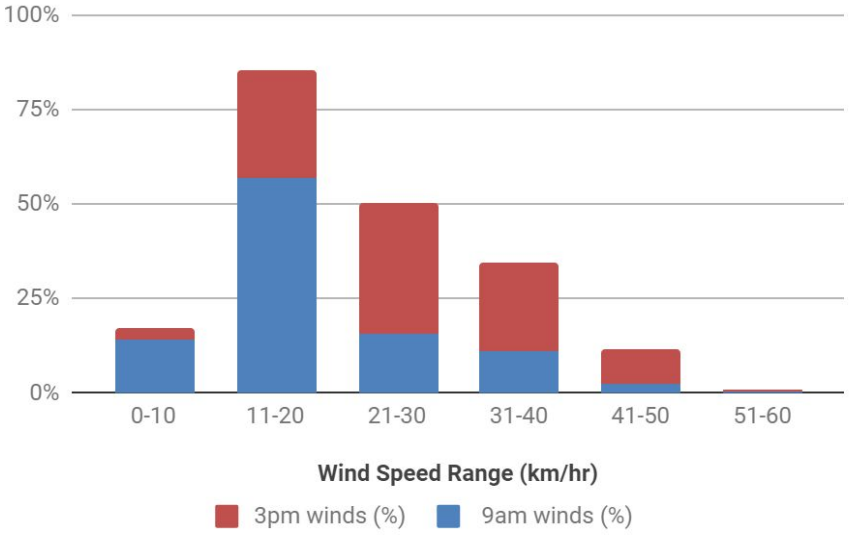


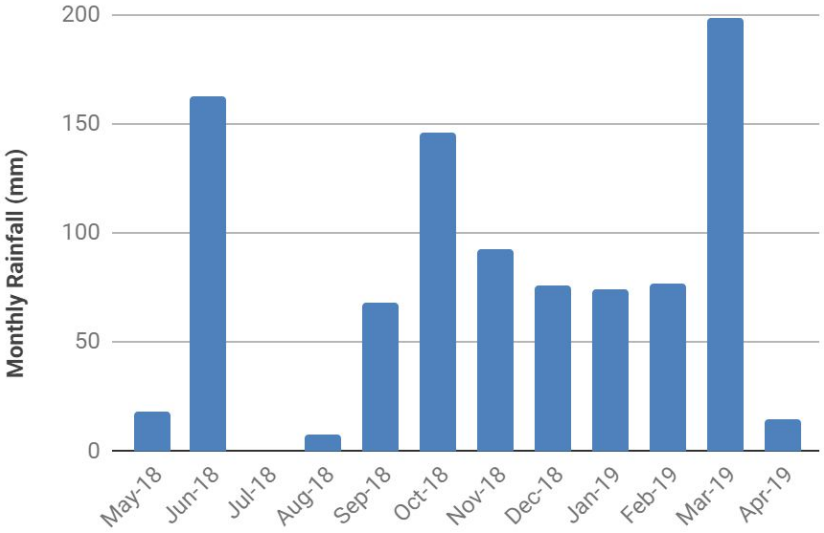
Figure 2.2 - Wind speed data at 9AM & 3PM for this reporting period



Ongoing rainfall data was monitored to supplement stormwater system operation and discharge, as well as for general housekeeping management such as inspection and maintenance for stormwater pits.

A summary of rainfall data at the Terminal during the reporting period is presented in Figure 2.3 Overall, the average rainfall for the Terminal during the reporting was approximately 69.4 mm per month.

Figure 2.3 - Monthly rainfall data during the reporting period 2018/2019



2.2 Air Quality

In accordance with the Consent, the Terminal has adopted performance criteria pertaining to dust and odour emissions which are summarised in Section 2.2.1 and Section 2.2.2 respectively.

Air quality monitoring was carried out as required to determine whether activities conducted at the Terminal impacted ambient air quality. Further details regarding air quality monitoring and management practices undertaken at the Terminal are provided in the following sections.

2.2.1 Dust

Potential dust impacts arising from operations at the Terminal were assessed against the EPA air quality dust emissions criteria which were identified in the *Banksmeadow Transfer Terminal Environmental Impact Statement* (EIS) prepared by Hyder Consulting Environmental (Hyder, 2004).

The EIS concluded that the key potential impact from dust associated with operations at the Terminal would likely be due to the emissions of small diameter particulate matter (PM10). Despite this, the EIS found that there would be negligible impact of PM10 particulates (i.e dust) at any off-site receivers, provided that reasonable dust controls are implemented.

To facilitate this, the Terminal operates a dust suppression system within the transfer building to minimize the emissions of dust. Dust is also controlled through the operation for a street sweeper on hardstand areas around the site. In addition, visual inspections of dust generating activities at the Terminal are also carried out on a regular basis, augmented by monitoring of weather conditions.

No dust complaints or issues noted in this reporting period.

2.2.2 Odour

Odour emissions from the Terminal were also assessed in the EIS in accordance with the NSW EPA document *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (NSW DEC, 2005). Results of the EIS indicated that when adequate odour mitigation and management measures are in operation, odour emissions from the Terminal's operation would be below the odour emission criteria presented in Table 2.2. It was also found that odour impacts are not predicted to exceed these levels at any residential receptor.

Table 2.2 - Odour Emission Criteria

Pollutant	Receptor	Criterion
Odour	Residential Receptors	2 Odour Units

To achieve the odour emission criteria, the Terminal operates an air extraction system within the terminal building which was designed to both ventilate the building, and capture and disperse

odour emissions from within the building. In addition, containers used for the transportation of waste are fitted with activated carbon filtration systems on air exhaust vents.

Routine odour monitoring is carried out in the form of weekly odour assessments along the Terminal's site boundaries which are conducted by on-site personnel, the results of which are recorded on weekly housekeeping checklists.

During this reporting period, four (4) odour investigations/audits were completed at the Terminal:

1. Banksmeadow Waste Transfer Terminal Facility - Odour Audit May 2018
2. Banksmeadow Waste Transfer Terminal Facility - Odour Investigation June 2018
3. Banksmeadow Waste Transfer Terminal Facility - Odour Audit October 2018
4. Banksmeadow Waste Transfer Terminal Facility - Odour Audit April 2019

During the previous AEMR period, the following improvement actions were completed:

- An increase in airflow extraction and optimisation of system performance to achieve a stack exit velocity of greater than 20 metres per second (m/s);
- The improvement in the waste shed building airflow dynamics via the construction of a wall interface between the waste shed floor and compactor pit area. The construction of this wall enables an enhanced level of airflow extraction control between these two key process areas and minimises undesirable building wind effects on the waste shed building.

In May 2018, TOU completed an additional odour investigation to assess the effectiveness of the discharge stack and provide options to improve performance (if needed). Based on the results obtained, it was found that no further works were required and the discharge stack was operating at optimal performance as predicted in the EIS. The status quo is expected to be maintained under the current (and recently updated) operating and maintenance practices at the Terminal.

This positive result has been confirmed in follow up odour investigations and audits carried out in June 2018, October 2018 and April 2019. In view of the results and findings as documented in all three follow up odour reports, TOU is of the view that the Facility is operating in a manner that is very unlikely to adversely impact the local amenity from an odour viewpoint under the measured and current operating circumstances as found in this odour audit and investigation visit.

This improvement has been validated through a significant reduction in the number of odour complaints received at the Terminal this reporting period compared to the previous reporting period. Refer to Section 3.4 for further details.

2.3 Water Monitoring

2.3.1 Groundwater Monitoring

In accordance with the Consent , biannual groundwater monitoring was conducted to assess potential impacts of operations on the groundwater quality.

Table 2.3 - Groundwater Monitoring Program

Monitoring Locations	Parameters	Units	Frequency	Sampling Method
GW1, GW2, GW3	Electrical Conductivity (EC)	µS/cm	Six monthly	Grab sample
	pH	pH		
	Total Dissolved Solids (TDS)	mg/L		
	Nitrogen (Ammonia)	mg/L		
	Biochemical Oxygen Demand (BOD)	mg/L		
	Water Levels (Depth to Water & Depth to Base)	Metres (m)		

Groundwater monitoring was conducted at three wells (GW1, GW2, GW3) in November 2018 and March 2019, please refer to Tables 2A, 2B and 2C below for the monitoring results.

Table 2A - Groundwater monitoring results for GW1

Parameter	Unit	GW1 Results	
		29 November 2018	21 March 2019
pH	pH	6.81	7.18
EC	µS/cm	864	926
TDS	mg/L	609	659
Ammonia as N	mg/L	0.03	0.05
BOD	mg/L	4	2

Table 2B - Groundwater monitoring results for GW2

Parameter	Unit	GW2 Results	
		29 November 2018	21 March 2019
pH	pH	6.81	7.32
EC	µS/cm	2100	1520
TDS	mg/L	1150	772
Ammonia as N	mg/L	1.20	1.00
BOD	mg/L	2	3

Table 2C - Groundwater monitoring results for GW3

Parameter	Unit	GW3 Results	
		29 November 2018	21 March 2019
pH	pH	7.17	7.55
EC	µS/cm	272	254
TDS	mg/L	198	174
Ammonia as N	mg/L	0.05	0.04
BOD	mg/L	4	2

Groundwater levels were between 1.13 m and 2.75 m (depth to water in metres) indicative of the shallow water table at the site. Ammonia and BOD concentrations were relatively low and ranged between 0.03 to 1.20 mg/L and 2 and 4 mg/L respectively.

Groundwater quality results at all wells were consistent with baseline levels.

2.3.2 Surface Water Monitoring

Stormwater discharge monitoring is conducted at the Terminal to monitor the effectiveness of all environmental measures in place to manage stormwater quality and infrastructure on site. Stormwater monitoring is also undertaken to assess the performance of the onsite stormwater

treatment system and whether stormwater flowing off site could be contaminated as a result of operations at the Terminal.

The results of stormwater monitoring are assessed against discharge limits stipulated within the EPL 20581 which are described in Table 2.5 below.

Table 2.5 - Stormwater Discharge Limits

Parameter	Concentration Limit (100 percentile limit)	Frequency	Statutory Requirements
pH	6-8.5 units	Daily, during any discharge event	Schedule 3, Condition 10 of the Consent EPL Condition M2.2
TSS (Total Suspended Solids)	50 mg/L		
Ammonia as N	1 mg/L		
BOD (Biochemical Oxygen Demand)	10 mg/L		
Oil & Grease	10 mg/L		

There were a number of rainfall events during the operation stage of the Terminal, which triggered the requirement to conduct stormwater monitoring, the results of which are summarised in Tables 2.6(A-D). Any exceedences against EPL limits are presented in red.

It should be noted that a number of locations were sampled from during this reporting period, rather than just the licenced EPL monitoring point.

In February 2018, cross contamination of stormwater from the downstream council drain was identified entering EPL Monitoring Point 1. Since the discovery of this issue, Veolia commenced an interim stormwater monitoring strategy in consultation with the EPA to collect samples from upstream locations of Monitoring Point 1, Following the completion of works undertaken to rectify cross contamination issues, sampling from EPL Monitoring Point 1 recommenced with revised monitoring procedures including the use of a swing sampler, to allow for sampling during low water flow.

All stormwater sampling results collected during the reporting period are provided in Tables 2.6A, 2.6B, 2.6C and 2.6D.

Table 2.6A - Stormwater Discharge Quality Results at the Composite Sampling Location during the reporting period 2018/2019.

Parameter	Unit	EPA Limits	Composite Sampling Location*		
			April 2018	June 2018	June 2018
pH	pH	6-8.5	7.56	7.39	7.02
TSS	mg/La	50	78	63	160
Ammonia as N	mg/L	1	0.09	0.03	0.06
BOD	mg/L	10	7	5	8
Oil & Grease	mg/L	10	<5	<5	<5

*Composite sample taken upstream of EPL Monitoring Point 1

During composite sampling, the samples collected were generally exceeding in TSS as compared to the EPL assigned limits. The reasoning behind this exceedance was due to the low water flow trickling through the composite sampling location which made it difficult to collect a representative sample. Following this, the composite sampling location was determined to be unsuitable for sampling of stormwater.

Table 2.6B - Stormwater Discharge Quality Results at the Humeceptor Outlet during the reporting period 2018/2019.

Parameter	Unit	EPA Limits	Humeceptor Outlet					
			03.09.18	07.09.18	26.09.18	04.10.18	12.10.18	15.10.18
pH	pH	6-8.5	7.77	7.00	8.48	7.66	7.80	7.91
TSS	mg/L	50	10	84	79	13	32	<5
Ammonia	mg/L	1	0.28	0.19	0.39	0.20	0.20	0.09
BOD	mg/L	10	11	14	<2	<2	<2	<2
Oil & Grease	mg/L	10	<5	<5	<5	<5	<5	<5

During the Humeceptor outlet sampling, the samples collected were generally within the TSS criteria as set by the EPL, with two exceptions in September. This was due to the Humeceptor accumulating sediment and a maintenance and clean out was scheduled in October. After the clean out and moving forward, the samples collected at the Humeceptor outlet, met the EPL set criteria.

Table 2.6C - Stormwater Discharge Quality Results at EPL Monitoring Point 1 2018.

Parameter	Unit	EPA Limits	EPL Monitoring Point 1			
			12.10.18	15.10.18	07.11.18	28.11.18
pH	pH	6-8.5	7.49	7.74	7.43	7.34
TSS	mg/L	50	7	<5	16	<5
Ammonia as N	mg/L	1	0.47	0.10	0.21	0.11
BOD	mg/L	10	<2	<2	3	4
Oil & Grease	mg/L	10	<5	<5	<5	<5

Table 2.6D- Stormwater Discharge Quality Results at EPL Monitoring Point 1 2019.

Parameter	Unit	EPA Limits	EPL Monitoring Point 1			
			20.02.19	19.03.19	20.03.19	05.04.19
pH	pH	6-8.5	7.86	7.63	7.32	7.79
TSS	mg/L	50	9	20	25	<5
Ammonia as N	mg/L	1	0.69	0.74	0.82	0.36
BOD	mg/L	10	<2	11	<2	<2
Oil & Grease	mg/L	10	<5	<5	<5	<5

During the reporting period, stormwater discharge samples collected from the EPL Monitoring Point 1 have vastly improved compared to the last reporting period based on corrective actions implemented to rectify off-site cross contamination issues at Monitoring Point 1. Since October 2018, the stormwater discharge quality generally did not exceed the concentration limits stipulated in the EPL 20581, with the exception at a slight exceedance for BOD of 11 mg/L on the 19th March 2019.

Overall stormwater quality results collected from October 2018 to April 2019 have vastly improved as compared to the previous reporting year.

2.3.3 Leachate Monitoring

Leachate is defined as any water which comes into contact with waste or waste processing areas and was generated through the management of waste delivered at the Terminal. All generated leachate from the tipping floor and compactor areas, as well as wash down water was collected into two 32 kilolitre (kL) leachate storage tanks for off-site disposal.

Leachate levels within the storage tanks were monitored by using a reference point on the containers, to determine when required to pump out and dispose.

2.4 Noise and Vibration

2.4.1 Noise and Vibration Monitoring

Operational activities at the Terminal act as potential sources of noise emissions which may impact nearby receivers. Noise modelling was undertaken as part of the EIS which found that the majority of the existing background noise levels at the Terminal are generated by the operation of the nearby IXOM Botany Bay site.

Despite this, to ensure any noise emissions did not cause any impact, a number of operational noise goals were adopted for the Terminal which are provided in Table 2.7.

Table 2.7 - Operational Amenity Noise Goals

Receptor Location	**Amenity Criterion (LAeq, 15 min, dB(A)**		
	Day	Evening	Night
Residential Receivers	50	40	37
Industrial Receivers	65	65	65
Commercial Receivers	70	70	70

An ambient noise assessment was conducted during the 2017-2018 reporting period indicated offsite noise emissions comply with the noise criteria.

In addition to the above, the performance of the Terminal in managing potential noise emissions will be assessed on the receipt of any noise complaints. No noise complaints were received in this reporting period, therefore the Consent Condition for monitoring was not triggered.

2.4.2 Vibration Monitoring

Vibration impacts during operation of the Terminal were assessed in the EIS to be negligible and to pose no potential impact on sensitive receivers, buildings or the environment.

A vibration assessment was conducted during the 2017-2018 reporting period which indicated vibration levels at residential receivers comply with the vibration criteria

No vibration complaints were received for the Terminal during this reporting period therefore not triggering the requirements for additional vibration monitoring.

2.5 Traffic

A traffic impact statement (TIS) was undertaken as part of the EIS to assess the potential impact of the Terminal on traffic and transport during its operation.

The TIS found that the Terminal would see up to 355 trucks per day for the delivery of mixed waste, and that there was a potential for nearby roads to be affected due to these truck movements. A number of mitigation measures were implemented at the Terminal to manage these potential impacts as detailed in the Traffic Management Plan including;

- **Truck Haulage and Turn Restrictions** - which impose access restrictions for the Terminal;
- **Onsite Traffic Routes** - to prevent the likelihood of collisions or accidents and minimise the tracking of waste offsite;
- **Traffic Congestion Procedures** - which details the measures to be followed to manage and/or clear traffic congestion on nearby roads as a result of operations at the Terminal; and
- **Driver Management** - training programs used to determine and/or enhance driver competency in professional conduct, workplace safety, risk, emergency response, and drug and alcohol policies.

Monitoring activities conducted at the Terminal assist in measuring the effectiveness of these traffic control measures. No vehicles were observed using any unauthorised roads as stipulated within Schedule 3, Condition 29 of the Consent.

A total of 56,817 vehicle (truck) movements occurred during the operation reporting period which is equivalent to 156 trucks per day. This is in line with the predicted truck movements of

355 trucks per day as described in the EIS. A breakdown of truck movements per month is provided in Table 2.8.

Table 2.8 - Truck Movements during the 2016/2017 & 2018/2019 reporting periods

Monitoring Period	Truck Movements 2017/2018	Truck Movements 2018/2019
29 to 30 April	100	280
May	4186	4925
June	4176	4661
July	4667	4800
August	4955	4936
September	4743	4492
October	4946	4964
November	4928	4784
December	5027	4785
January	5140	4734
February	4420	4378
March	4895	4693
1 to 28 April	4300	4385
Total	**56,483**	**56,817**

2.6 Waste

A Waste Management Plan (WMP) was prepared which details the control strategies and mechanisms for the effective monitoring and recording of waste at the Terminal as shown in Table 2.9.

Table 2.9 - Waste Monitoring Schedule

Condition Reference	Type of Monitoring	Frequency
Waste volume processing • Storage on site	Waste on floor	Daily
Waste volume processing • Annual limit	Tonnage data review	Ongoing
Waste Recording	Incoming Waste Processing	Ongoing

2.6.1 Waste Volume Monitoring

Schedule 2, Condition 5 of the Consent stipulates that the Terminal must not receive or process more than 400,000 tonnes per annum (TPA) of putrescible waste and 100,000 TPA of non-putrescible waste. Veolia utilises the data provided by SAP to track and monitor the amount of incoming waste in accordance with the limits of the Consent. Refer to Table 2.10 for total putrescible and non-putrescible waste received at the Terminal for the 2018 calendar year.

Table 2.10 - Total Putrescible and Non-Putrescible waste received for the 2018 calendar year

Monitoring Period	Incoming Putrescible Waste 2018 (tonnes)	Incoming Non-Putrescible Waste 2018 (tonnes)
January	28,230	145
February	24,972	0
March	27,314	2
April	24,948	2
May	26,337	0
June	25,066	0
July	25,079	0

August	25,601	0
September	23,895	1
October	26,830	0
November	26,105	199
December	27,112	240
Total	**311,489**	**589**

The amount of waste accepted at the Terminal in the 2018 calendar year totalled 312,078 tonnes compared to 275,829 tonnes in the 2017 calendar year. The Terminal operated within the annual waste limit, making this reporting period the Terminal's second full year. Refer to Table 2.11 below.

Table 2.11 - Incoming waste in 2017 and 2018 calendar years

Monitoring Period	Incoming Waste 2017 (tonnes)	Incoming Waste 2018 (tonnes)
January	16,968	28,375
February	16,877	24,971
March	19,859	27,316
April	18,902	24,950
May	21,970	26,337
June	21,941	25,066
July	24,180	25,079
August	26,233	25,600
September	25,269	23,896
October	27,730	26,829
November	27,730	26,304
December	28,467	27,353
Total	**275,829**	**312,078**

2.6.2 Waste Recording

All waste received at the Terminal was recorded in the Systems, Applications and Products in Data Processing (SAP) software. SAP records vehicle registrations, the date and time of delivery, the gross and tare weight of the vehicle, as well as the nature and origin of the waste delivered by each contractor.

Visual assessments of incoming waste was conducted by weighbridge operators and assisted by close circuit television. These visual assessments were conducted to identify, reject and/or separate non-conforming waste upon its arrival to the Terminal. Waste was also inspected as it was tipped/unloaded onto the tipping floor.

No incoming non-conforming waste was recorded during this period.

2.7 Pests and Vermin

The management of pest and vermin at the Terminal was maintained through preventative and responsive mitigation measures as per the Landscaping Management Plan. Such measures included;

- Routine inspections of site by a registered pest controller
- Weekly Site Inspections to record site conditions such as evidence of vermin and pests
- Placement of rodent bait stations at various locations around the site

Pest control was undertaken by an external contractor (Expert Judgement Pest Management PTY LTD) during this reporting period. In total five (5) pest control service reports were completed during the reporting period and are provided in **Appendix B.** Routine pest control service usually involves an initial inspection of the Terminal buildings (site office, weighbridge office and waste shed), followed by any necessary treatment for rodents, cockroaches and spiders.

No pest and/or vermin complaints or management issues were reported during the operation of the Terminal during the reporting period.

Section 3 - Environmental Performance

The environmental performance of the Terminal is assessed through the results of environmental monitoring, internal inspections, as well as internal environmental audits.

A discussion of the findings identified in this AEMR, as well as the corrective actions that were implemented are provided within this section. A comparison is also made to the findings and corrective actions implemented in the previous reporting period to present the changes to the environmental performance of the Terminal.

3.1 Previous Findings and Voluntary Improvements

Findings identified during the 2017/2018 reporting period are detailed in Table 3.1 below to show that, corrective actions to resolve/manage these findings were implemented and completed in this reporting period.

Table 3.1 - Findings and Corrective Actions in the 2017/2018 reporting period.

Relevant Condition	Findings	Corrective Actions	Person/Team Responsible	Status
Schedule 3, Condition 9	Evidence of stormwater backflow from off-site sources at EPL Monitoring Point 1	Implement an interim stormwater monitoring strategy to obtain samples representative of stormwater quality at the Terminal, and to collect manual samples from the nearest accessible points upstream of EPL Monitoring Point 1 as provided in	Operations Project Manager - NSW Resource Recovery Team	Completed March 2018
		Report defect to building contractors (Lipman).	Facility Manager - NSW Resource	Defect Report submitted May 2018.

			Recovery Team	
		Lipman to rectify defect and/or modify stormwater drainage line to eliminate ingress of off-site at EPL Monitoring Point 1.	Facility Manager - NSW Resource Recovery Team	Completed August 2018
Schedule 3, Condition 3	A total of 48 odour complaints were received at the Terminal	Sealing up of the eastern and southern breezeways to minimise potential fugitive odour emissions being released from the waste shed .	Facility Manager - NSW Resource Recovery Team	Completed February 2018
		Sealing up of the gap opening between the interface of the waste floor and compactor areas to minimise potential fugitive odour emissions being released from the waste shed	Facility Manager - NSW Resource Recovery Team	Completed April 2018
		Provision of an additional carbon pad filter (two in total) installed in the waste container ventilation openings.	Facility Manager - NSW Resource Recovery Team	Completed April 2018
		Increased carbon filter pad replacement frequency to 6-monthly (previously annual).	Facility Manager - NSW Resource Recovery Team	Completed May 2018
		Optimisation and service works on the two fan modules.	Facility Manager - NSW Resource	Completed May 2018

			Recovery Team	
		Clean up service of the air extraction plenum chamber and optimisation of the extraction duct louvres by an external contractor.	Facility Manager - NSW Resource Recovery Team	Completed May 2018

3.2 Current Findings and Voluntary Improvements

In accordance with schedule 4 condition 6 of the Consent Veolia commissioned an Independent Environmental Audit (IEA) for the Terminal. Veolia engaged Jackson Environment and Consulting (JEC), on approval from the Department of Planning and Environment (DPE), to conduct the IEA.

JEC assessed the Development against the Consent Conditions, as well as the EPL. The 2019 audit found no non-compliances, and a small number of observations. The table below demonstrates the status of areas of observations/ recommendations identified in the IEA-2019.

Table 3.2 - Observations and Corrective Actions in the 2018/2019 reporting period

Relevant Condition	Observations	Corrective Actions	Person/Team Responsible	Status
Schedule 3, Condition 21	Weed management - It is recommended that weed management, in accordance with the Landscape and Vegetation Management Plan, is resumed to avoid the continued growth and potential spread of weed within, and properties adjacent to the site.	Veolia has engaged new landscape contractor for the ongoing weed management on the site in accordance with the Landscape and Vegetation Management Plan. Periodic inspections at the Terminal will be undertaken to avoid any potential spread of weeds.	Facility Manager - NSW Resource Recovery Team	Completed May 2019, Ongoing inspections

Schedule 3, Condition 9 and 10	Increase the frequency of drain cleaning in the main tipping building and include regular inspections to ensure that the leachate is not accumulating and potentially causing odour which could migrate outside of the processing shed.	Drain will be inspected daily as part of the Terminal's operations. The frequency of cleaning the drains in the main tipping building is increased from once to twice per day.	Facility Manager - NSW Resource Recovery Team	Completed May 2019, Ongoing housekeeping

3.3 Complaints

A total of 18 complaints were issued to the Terminal during the operation of the Terminal within this reporting period, all of which related to odour emissions. 17 of the odour complaints were received directly from IXOM who are located north-east of the Terminal. The remaining 1 complaint was received by a Matraville resident. There has been a significant reduction of odour complaints a total of 18 this reporting year, compared to last reporting year with a total of 48.

Complaints were generally received between the hours of when wind directions originated from a westerly to south-westerly direction.

Following the receipt of each odour complaint:

1. The Terminal implements corrective actions to reduce odour emissions such as adjustment of fan extraction system speed setting;
2. The Site Manager communicates any corrective actions taken on the site with the complainant;
3. Meteorological wind data is downloaded from the BoM website;
4. Details of the complaint and wind data are logged in the BTT Complaints Register (**Appendix C**).

3.4 Conclusion

A number of improvements to the environmental management of the Terminal have been implemented during this reporting period. These improvements were implemented as a result of site investigations, complaints, regulatory feedback, as well as Veolia's internal assurance program.

The Independent Environmental Audit (IEA) identified no non-compliances, and auditors note Veolia's environmental performance has improved significantly since 2016 due to improvements in operations and physical changes to the site.

There have been continual improvements to the Terminal this reporting period, which in turn has improved the stormwater and odour management on site. There has been a significant reduction in the number of odour complaints and a vast improvement of stormwater quality results this reporting period.

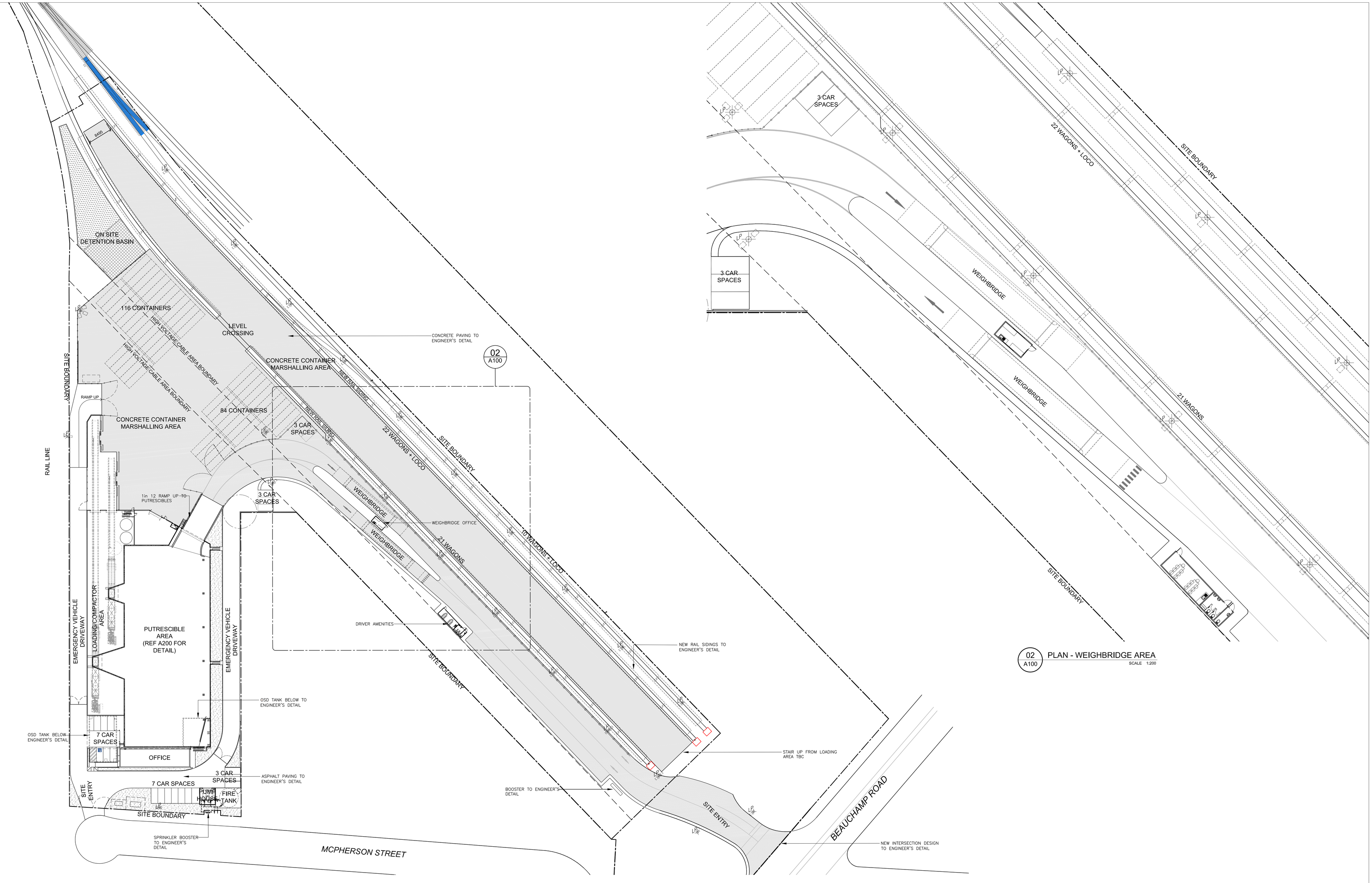
Recent feedback from neighbouring businesses and monitoring quality results, indicate an immense improvement in the overall environmental performance of the Terminal in relation to stormwater and odour management. Veolia will continue to monitor and assess the Terminal's environmental performance through to the next reporting period.

References

1. NSW DEC (2005) *"Approved Methods for the Modelling and Assessment of Air Pollutants in NSW"*, August 2005.
2. DEC (2006) "*Technical framework: assessment and management of odour from stationary sources in NSW"*, Department of Environment and Conservation, November 2006.
3. DLA (2016) Baseline Environmental Site Assessment: 34-36 McPherson street Banksmeadow, DLA Environmental, February 2016.
4. DLA (2016) Validation Report 34-36 McPherson street Banksmeadow, DLA Environmental, July 2016.
5. EPA (2014), *"NSW Waste Classification Guidelines"*, NSW Environmental Protection Agency, January 1996.
6. Hyder (2014), Banksmeadow Transfer Terminal Environmental Impact Statement, Hyder Consulting, July 2016.
7. VES (2017/2018), Banksmeadow Transfer Terminal Annual Environmental Management Report, Veolia, April 2018.
8. SLR Consulting (2017), Noise and Vibration Assessment, August 2017.
9. Jackson (2019), Independent Environmental Audit Veolia Environmental Services Australia, Banksmeadow Transfer Terminal, May 2019.

Appendices

Appendix A - Site Plan



01 A100 PLAN
SCALE 1:500

02 A100 PLAN - WEIGHBRIDGE AREA
SCALE 1:200

REV:	DETAILS:	DATE:	BY:
P1	PRELIMINARY CLIENT REVIEW	10/6/15	AD
P2	REVISIONS AS CLOUDED	11/6/15	AD
P3	REVISIONS AS CLOUDED	17/6/15	AD
P4	COMPACTOR LOCATIONS, RAMP REVISED	23/6/15	AD
P5	MAIN RAMP REVISED	26/6/15	AD
P6	CONSTRUCTION CERTIFICATE ISSUE	3/8/15	AD
P7	PARKING REVISED	6/8/15	AD
P8	PUMP HOUSE, PARKING, EAST DRIVEWAY STAIRS NR RAMP, EAST STAIRS DEL	7/08/15	AD
C1	CONSTRUCTION ISSUE	2/12/15	MC

GENERAL NOTES:

1. DO NOT SCALE DRAWINGS, FOLLOW WRITTEN DIMENSIONS ONLY
2. ALL WORKS TO BE IN ACCORDANCE WITH BUILDING CODE OF AUSTRALIA (2015)
3. ALL DOORS IN THE PATH OF TRAVEL TO AN EXIT TO BE FITTED WITH LOCKS WHICH CAN BE OPENED AT ALL TIMES BY PERSON SEEKING EGRESS BY USE OF DOWNWARD ACTION ON LEVER LOCATED BETWEEN 900mm AND 1100mm ABOVE FLOOR
4. WALKWAY AND LANDING HANDRAILS/GUARDRAILS TO BE 1050 MIN ABOVE FFL.
5. ALL STAIR TREADS TO BE WEBFORGE HOT DIP GALVANISED GRATED STEEL STAIR TREADS. TREAD TYPE TO BE T5 OR T6, GRATING PATTERN TO BE TYPE A. SIZES TO BE AS MARKED ON DRAWINGS. NO SITE WELDS PERMITTED. NO WELDS PERMITTED AFTER HOT DIP GALVANISING TAKES PLACE.
6. ALL INTERNAL AND EXTERNAL STEEL TO BE HOT DIP GALVANISED. AFTER HOT DIP GALVANISING PROCESS, STEEL MUST NOT BE WELDED, GROUND, CUT, OR SUBJECT TO ANY OTHER PROCESS WHICH MAY COMPROMISE THE GALVANISING LAYER. IF THE GALVANISING LAYER IS COMPROMISED, THEN THE ELEMENT(S) MUST BE HOT DIP GALVANISED AGAIN BEFORE INSTALLATION.
7. ALL GLAZING TO BE TO AS1288
8. REFER TO DRAWING A800 FOR LEGEND OF ALL DRAWING TAGS AND ABBREVIATIONS

LIPMAN the obvious choice

VEOLIA

PROJECT NORTH

TRUE NORTH

PROJECT: BANKSMEADOW TERMINAL
PROJECT NUMBER: 1414
DRAWING NUMBER: A100
REVISION: C1
CLIENT: LIPMAN PTY LTD
DRAWING NAME: SITE PLAN
DRAWING STATUS: CONSTRUCTION ISSUE
SCALE: 1:500 @B1 1:1250 @A3
DATE: 6/15
DRAWN: AD

ALL WORKS TO FOLLOW WRITTEN DIMENSIONS. DO NOT SCALE DIMENSIONS, THESE DRAWINGS REMAIN THE COPYRIGHT OF DAV ARC PTY LTD

davidson architecture
2/70 Kerr Street Fitzroy 3065
0415 12 57 56
abn 186 626 099 374

Appendix B - Pest Control Reports

SERVICE REPORT

30/05/2018

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
Fax: (02) 9715 5370
ABN 63 081 548 861

Property Detail:

Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details:

A quarterly pest control service to for cockroaches ants, spiders and rodents.

Inspected and treated offices, staff rooms, kitchen, toilets and weighbridge by using Goliath cocroach gel.

Inspected and treated compact areas, shed and external areas by using Roban rodent bait and Cislin 25 spray.

SERVICE REPORT

3/09/2018

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
Fax: (02) 9715 5370
ABN 63 081 548 861

Property Detail:

Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details:

A quarterly pest control service to for cockroaches

ants, spiders and rodents.

Inspected and treated offices, staff rooms, kitchen,

toilets and weighbridge by using Goliath cockroach gel.

Inspected and treated compact areas, shed and

external areas by using Roban rodent bait and

Cislin 25 spray.

Light rodent activity found in shed area and treated

by using Roban rodent bait.

SERVICE REPORT

8/11/2018

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
Fax: (02) 9715 5370
ABN 63 081 548 861

Property Detail:

Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details:

A quarterly pest control service for cockroaches, ants, spiders and rodents.

Inspected and treated staff rooms, kitchens and toilets by using Goliath cockroach gel.

Inspected and treated compactor areas, shed and storage areas by using Roban rodent bait.

Inspected and treated external areas by using Cislin 25 spray.

Spider and ant activity found in external area and treated by using Cislin 25 spray.

SERVICE REPORT

22/02/2019

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
ABN 63 081 548 861

Property Detail:

Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details:

A quarterly pest control service for cockroaches, ants, spiders and rodents.

Inspected and treated staff rooms, kitchens and toilets by using Goliath cockroach gel.

Inspected and treated compactor areas, shed and storage areas by using Roban rodent bait, Coopex dust spot spray and Racumin 8 rodent bait.

Spider activity area found in external windows area and treated by using Cislin 25 spray.

Deceased rodent removed from shed area.

SERVICE REPORT

29/03/2019

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
ABN 63 081 548 861

Property Detail: Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details: Follow-up treatment for rodent activity.

Inspected and treated office roof void area by

using Roban rodent bait.

Inspected and treated external area by using

Roban rodent bait and Racumin 8 rodent bait.

SERVICE REPORT

28/05/2019

Service Performed by:

EXPERT JUDGEMENT
PEST MANAGEMENT PTY LTD
PO Box A25, ENFIELD SOUTH NSW 2133
enquiries@expertjudgementpest.com.au
Telephone: (02) 9715 5270
ABN 63 081 548 861

Property Detail:

Veolia Environmental Services (Australia) Pty Ltd
Banksmeadow Transfer Terminal
34-36 Mcpherson St
BANKSMEADOW NSW 2019

Service Details:

A quarterly pest control service to offices,

staffroom, shed, compactor and external area

for cockroaches, ants, spiders and rodents.

Inspected and treated office, staffrooms, kitchens

andtoilets by using Goliath cockroach gel.

Inspected and treated compactor areas, shed and

external area by using Roban rodent bait, Coopex

dust spot spray and Racumin 8 rodent bait.

Light rodent activity found in shed and external area

and treated by using rodent bait.

Appendix C - Complaints Register

Date	Time	Method	Person Details	Nature of the Odour	Action taken by Veolia	Follow-up contact	Further Action taken by Veolia
12-05-18	07:20	Phone	Sebastian - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). It was noted the waste shed was had 30 tonnes and approximately 70 full boxes were being stored on the container storage area. The fans were temporarily turned off.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (7:00): 28 km/hr		
					Wind direction at time of complaint: West-South-West		
14-05-18	06:30	Phone	Steve Barclay - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz) and was temporarily turned off.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (6:30): 33 km/hr		
					Wind direction at time of complaint: South-West		
15-05-18	10:30	Phone	Marty - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz).It was noted the waste shed was had 300 tonnes and approximately 35 full boxes were being stored on the container storage area. The fans were temporarily turned off.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (10:30): 11 km/hr		
					Wind direction at time of complaint: West-South-West		
18-05-18	10:30	Phone	Steve Barclay - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). It was noted approximately 400 tonnes of waste was on the floor.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
					IXOM site was in shutdown period at the time of the complaint indicating elevated receptors present on maintenance platform.		
			Steve.barclay@orica.com				
					Wind speed at time of complaint (10:30): 14 km/hr		
					Wind direction at time of complaint: West-South-West		

21-05-18	12:00	Phone	Sebastian - Orica (IXOM) control room	Odour Complaint	As there were SW winds noted at the site, Veolia contacted IXOM to check if any odour was present at their site. IXOM confirmed there was odour and it was quite strong. It was also mentioned that the odour at the elevated platform was considerably stronger.	Veolia had initiated contact with IXOM requesting odour feedback to assist in on-going odour investigations.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
					The odour control system fan had been running at full speed (55Hz). It was noted approximately 150 tonnes of waste was on the floor.		
			Steve.barclay@orica.com				
					Wind speed at time of complaint (12:00): 28 km/hr		
					Wind direction at time of complaint: West		
22-05-18	11:40	Phone	Andy - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz).It was noted the waste shed was had 300 tonnes and approximately 35 full boxes were being stored on the container storage area.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (11:40): 19 km/hr		
					Wind direction at time of complaint: West		
09-08-18	09:30	Phone	Josh - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). At the time of the complaint, it was noted that there was the site leachate tank line was blocked and required filling of site liquid tanker to transfer leachate. Odour source resulting from ventilation point on tanker.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (09:30): 9 km/hr		
					Wind direction at time of complaint: West-South-West		
09-08-18	09:30	Phone	Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). At the time of the complaint, it was noted the site was operating under upset conditions, where a leachate liquid transfer on the hard stand was required.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (09:30): 9 km/hr		
					Wind direction at time of complaint: West-South-West		
12-08-18	08:00	Phone	Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). At the time of the complaint, it was noted the site was operating under upset conditions, where leachate and solids from bottom of tank were being disposed in Waste shed.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.

			Steve.barclay@orica.com				
					Wind speed at time of complaint (08:00): 9 km/hr		
					Wind direction at time of complaint: West-South-West		
13-08-18	09:30	Phone	Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). At the time of the complaint, it was noted the site was operating under upset conditions, where remnants of solids were present in the waste shed and compactor pit.	Complainant was requested to call back in 1 hour if no improvement, no call back received.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (09:30): 30 km/hr		
					Wind direction at time of complaint: West		
21-08-18	12:00	Phone	Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). At the time of the complaint, no odour was noted at the site. Odour proved to be other source.	Communicated back to IXOM.	No further action required.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (12:00): 52 km/hr		
					Wind direction at time of complaint: West-North-West		
25-10-18	08:50	Phone	Craig - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). The waste shed had low waste volumes and the container storage area had approximately 30 waste filled containers at the site.	The Site Manager conducted an odour assessment around the boundary of the site. No odour was detected at the eastern boundary of the site.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
						Complainant was requested to call back in 1 hour if no improvement, no call back received.	
			Steve.barclay@orica.com				
					Wind speed at time of complaint (08:50): 11 km/hr		
					Wind direction at time of complaint:South-West		

08-11-18	08:30	Phone	Steve Barclay - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). The waste shed had low waste volumes and the container storage area had approximately 30 waste filled containers at the site. Odour was detected at the elevated platform at IXOM site.	The BTT Site Manager conducted an odour assessment around the boundary of the site. No odour was detected at the eastern boundary of the site.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
						BTT Site Manager attempted to mobilise the Odour Unit to conduct a field odour assessment at the IXOM site however the available consultant had not been inducted at IXOM.	BTT Site Manager to arrange induction of Odour Unit consultant during the next scheduled induction.
			Steve.barclay@orica.com				
					Wind speed at time of complaint (08:50): 26 km/hr		
					Wind direction at time of complaint:South-West		
30-01-19	14:20	Phone	Leanne Fuller - Matraville Resident	Odour Complaint	The resident detected an odour that was consistent with (a tip) on the corner of Beachamp Rd and Perry Street. She also mentioned that she was able to smell the same smell the 3 days leading up to this day.	Complainant was requested to contact the site if the odour is detected again. No further contact was made.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
					The BTT Site Manager contacted the resident to discuss operational conditions at the time of the alleged odour from the site.		
					Weather data not available at receipt of odour complaint		
14-02-19		Phone	Steve Barclay - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). The waste shed had approximately 100 tonnes of waste on the floor.	BTT Site Manager attempted to mobilise the Odour Unit to conduct a field odour assessment at the IXOM site however the consultant was not available.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint: 11 km/hr		
					Wind direction at time of complaint:South-West		

05-03-19	09:15	Phone	Josh - Orica (IXOM) control room	Odour Complaint	The odour control system fan was temporary shut down for maintenance. The waste shed had low waste volumes (approx 30 tonnes) and the container storage area had approximately 25 waste filled containers at the site.	BTT Site Supervisor advised the complainant that the fans were temporarily off for service.	Fans were switched back on following servicing and the complainant was advised.
							The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint: 20 km/hr		
					Wind direction at time of complaint:North-North-East		
12-03-19	13:45	Phone	Sebastian - Orica (IXOM) control room	Odour Complaint	One compactor was shut down due to maintenance works. The waste shed had approx 400 tonnes and the container storage area had approximately 27 waste filled containers at the site.	BTT Site Supervisor advised the complainant that one compactor was down at the time of the complaint.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint: 19 km/hr		
					Wind direction at time of complaint:West-South-West		
28-03-19	10:40	Phone	Darren - Orica (IXOM) control room	Odour Complaint	The odour control system fan had been running at full speed (55Hz). The waste shed had medium waste levels on the floor and approximately 30 waste filled containers at the site.	BTT Site Supervisor conducted a boundary survey at the railing siding and noted no odour detection. This was communicated to the complainant and it was also noted that the wind direction was WNW at the time therefore IXOM was not downwind of the site.	The complaint was added to the Odour Feedback Register to assist in fine-tuning the plant and optimising parameters.
			Steve.barclay@orica.com				
					Wind speed at time of complaint: 9 km/hr		
					Wind direction at time of complaint:West-North-West		