


Annual Environmental Management Report - Clyde Transfer Terminal 2020-2021



**NSW Resource Recovery Annual Environmental
Management Report - Clyde Transfer Terminal**

Issue Date 15/03/2021

Name of operation	Clyde Transfer Terminal
Name of operator	Veolia Environmental Services
Development consent / project approval #	DA 205-08-01
Name of holder of development consent / project approval	Veolia Environmental Services
Mining lease #	NA
Name of holder of mining lease	NA
Water licence #	NA
Name of holder of the water licence	NA
MOP/RMP start date	NA
MOP/RMP end date	NA
Annual Review start date	15th of January 2020
Annual Review end date	14th of January 2021
<p>I, Sara Maddison, certify that this audit report is a true and accurate record of the compliance status of Clyde Transfer Terminal for the period 15 January 2020-14 January 2021 and that I am authorised to make this statement on behalf of Veolia Environmental Services.</p> <p><i>Note:</i></p> <p>a) <i>The Annual Review is an 'environmental audit' for the purposes of section 122B(2) of the Environmental Planning and Assessment Act 1979. Section 122E provides that a person must not include false or misleading information (or provide information for inclusion in) an audit report produced to the Minister in connection with an environmental audit if the person knows that the information is false or misleading in a material respect. The maximum penalty is, in the case of a corporation, \$1 million and for an individual, \$250,000.</i></p> <p>b) <i>The Crimes Act 1900 contains other offences relating to false and misleading information: section 192G (Intention to defraud by false or misleading statement—maximum penalty 5 years imprisonment); sections 307A, 307B and 307C (False or misleading applications/information/documents—maximum penalty 2 years imprisonment or \$22,000, or both).</i></p>	
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Status:

FINAL

Document Revision Register:

Rev	Revision Details	Issued to	Date
1	Draft for internal review	<ul style="list-style-type: none"> Veolia NSW Resource Recovery Team Veolia NSW SHEQ Team 	February 2020
1	Final	<ul style="list-style-type: none"> NSW Department of Planning, Industry and the Environment NSW Environment Protection Authority Cumberland City Council 	March 2020

Contents

Executive Summary	5
1. Introduction	6
Site Background	6
Legislative Requirements	6
Responsibilities	8
2. Environmental Monitoring and Management	9
2.1 Monitoring Requirements	9
2.1.1 Meteorology	10
Wind Speed, Wind Direction and Sigma Theta	10
Temperature and Solar Radiation	10
Evaporation	10
Rainfall	11
2.2 Air Quality	12
2.2.1 Dust	12
2.3 Noise Monitoring	15
2.3.1 Truck Noise Monitoring	15
2.4 Traffic Monitoring	16
2.4.1 Traffic Movements	16
2.4.2 Traffic Infringements	17
2.5 Waste Monitoring	17
2.5.1 Waste Volume Monitoring	18
2.6 Pests and Vermin	19
2.7 Community Consultation	19
3. Environmental Performance	21
3.1 Previous Non-Compliances	21
3.2 Current Non-Compliances	22

**NSW Resource Recovery Annual Environmental
Management Report - Clyde Transfer Terminal**

Issue Date 15/03/2021

3.3 Opportunities for Improvement	24
3.4 Complaints	26
3.5 Conclusion	27
Terms and Definitions	28
Reference Documents	29
Appendix A - Site Location Plan	30
Appendix B - Conditions of Development Consent Compliance Table	31
Appendix C - Environmental Monitoring Locations Plan	32
Appendix D - Monitoring Data	33
Appendix D1 - Meteorological Data	34
Appendix D2 - Odour Monitoring Data	35
Appendix D3 - Noise Monitoring Data	36
Appendix D4 - Pest & Vermin Reports	37

Executive Summary

This Annual Environmental Management Report (AEMR) is the 17th report prepared to detail the environmental performance of the Clyde Transfer Terminal (The Terminal), owned and operated by Veolia Australia and New Zealand (Veolia). This AEMR covers the period from the 15th January 2020 to 14th January 2021 (reporting period).

Veolia has prepared this AEMR in accordance with Consent Condition 58 and 59 of the Development Consent DA 205-08-01 (the Consent) and subsequent modifications, as well as relevant legislative requirements and industry best practices.

This AEMR provides a summary of environmental monitoring conducted at the Terminal and any non-compliances identified against the Consent during the reporting period, as well as the corrective actions, where implemented, to address such non-compliances.

An Independent Environmental Audit (IEA), undertaken in accordance with Condition 60 of the Consent, identified three non-compliance against the Conditions of the Consent (hereby referred to as Consent Conditions) during this reporting period which was as follows:

- Condition 50 - Enforce punitive measures against non-conforming customers whenever traffic restrictions are breached
- Condition 126 (c) - An estimate of the annual cost for implementation of the Emergency Response plan (ERP) should be included in the ERP
- Condition 136 - Establish and maintain a trust fund to facilitate the functioning of a Community Consultative Committee

1. Introduction

1.1 Site Background

The Terminal is located within a portion of the Clyde Rail Yard at 322 Parramatta Road and forms part of Lot 21 of DP10076683 in the Cumberland City Council area (Council). A site layout and location plan is provided in **Appendix A**.

The Terminal was granted ministerial approval in 2003 to operate under the Clyde Waste Transfer Terminal (Special Provisions) Act 2003 (assented 8 December 2003). The Consent was modified (29 April 2019) to permit the Terminal to receive up to 600,000 tonnes per annum (TPA) of mixed waste.

Clyde Waste Transfer Terminal commenced operations in 2004, accepting putrescible waste from the Sydney metropolitan area, which is containerised and loaded onto rail wagons for transportation in the Southern Tablelands (approximately 250 kilometres southwest of Sydney) for treatment, recycling and energy recovery.

1.2 Legislative Requirements

The key environmental legislation for the Terminal includes the Environmental Planning and Assessment Act 1979 regulated by the DPIE, and the Protection of the Environment Operations Act 1997 (POEO Act) regulated by the NSW Environment Protection Authority (EPA), as well as their respective associated regulations.

Legislative instruments governing the environmental performance for the Terminal include the Consent, under the Clyde Waste Transfer Terminal (Special Provisions) Act 2003 and an Environment Protection Licence (EPL) 11763 issued by the EPA, under the POEO Act. These permits regulate the operational activities conducted at the Terminal.

The table provided in **Appendix B** addresses the compliance against all Consent Conditions. Those relevant to the preparation of this AEMR are provided in **Table 1.1** below.

Table 1.1 Consent Conditions for the preparation of this AEMR

Relevant Condition	Requirement
GENERAL ENVIRONMENTAL MANAGEMENT	
<i>Environmental Monitoring Program</i>	
58	The Applicant shall include a report on the Environmental Monitoring Program in the Annual Environmental Management Report. The report must: <ul style="list-style-type: none"> (a) Summarise the results from the Environmental Monitoring Program over the previous year

	<ul style="list-style-type: none"> (b) Analyse the results in relation to both past performance, and the relevant standards and performance measures of the development (c) Identify any emerging trends in the data over the life of the development (d) Include a copy of the detailed monitoring results as an attachment.
Annual Environmental Management Report	
59	<p>Between twelve and fourteen months after the issue date of an environmental protection licence for the development; and annually thereafter for the duration of the development, the Applicant shall submit an Annual Environmental Management Report to the Secretary, the EPA and the Community Consultative Committee. The report shall be made available to the public on request to the Application. The report combined with the Annual Return required by the environment protection licence to be submitted to the EPA. The report must:</p> <ul style="list-style-type: none"> (a) Identify all the standards, performance measures, and statutory requirements the development is required to comply with (b) Review the environmental performance of the development to determine whether it is complying with the standards, performance measures and statutory requirements (c) Identify each occasion during the previous year when the standards, performance measures, or statutory requirements have not been complied with (d) where any non-conformance is identified, describe the actions or measures taken to ensure compliance, who is responsible for carrying out the actions, and when the actions were (or will be) implemented (e) include a summary of any complaints made about the development, and indicate the actions taken to address the complaints (f) include a report on the Environmental Monitoring Program as specified in this Consent.
Independent Environmental Audits	
60	<p>Every year following the date of this consent or at periods otherwise agreed to by the Planning Secretary, and until such time as agreed to by the Planning Secretary, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:</p> <ul style="list-style-type: none"> (a) be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Monitoring and any specifications of the Planning Secretary; (b) be conducted by a suitably qualified independent person approved by the Planning Secretary; (c) assess compliance with the requirements of this consent; (d) assess the implementation of the EMP (Construction) and EMP (Operation) and review the effectiveness of the environmental management of the development; and (e) be carried out at the Applicants' expense. <p>The audits shall be submitted to the Planning Secretary.</p>

	The Applicant shall comply with all reasonable requirements of the Planning Secretary in respect of any measures arising from or recommended by the audits and within such time as agreed to by the Planning Secretary.
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1.3 Responsibilities

The Environmental Management Representative (EMR) for this reporting period was Sara Maddison (Operations Project Manager) as per Consent Condition 55.

Environmental monitoring was undertaken by the NSW Resource Recovery technical support personnel - Sara Maddison (Operations Project Manager) and Mary Wong (Graduate Environmental Engineer).

The Odour Unit PTY LTD (TOU) was appointed to conduct biannual odour audits.

Hydrometric Consulting Services completed quarterly calibrations of the weather station.

Expert Judgement Pest Management Pty Ltd (Expert) was appointed for pest and vermin control throughout this reporting period and inspections are undertaken on a routine basis. In addition to this, there are routine inspections undertaken by the Terminal's operators, as part of general housekeeping and recorded on relevant Housekeeping and Inspection checklists.

Epic Environmental conducted an IEA in November 2020. The audit team associated with this IEA included Gary Bagwell and Romin Nejad (Lead Auditor), approved by the DPIE in accordance with Consent Condition 60.

2. Environmental Monitoring and Management

2.1 Monitoring Requirements

The following sections detail the monitoring undertaken throughout the reporting period in accordance with the Environmental Monitoring Program proposed 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 program for the Terminal and a monitoring location plan is provided in **Appendix C**.

Table 2.1 - Summary of the environmental monitoring program for the Terminal

Consent Condition	Type of Monitoring	Frequency	Commentary
48 (f)	Odour Audits	Biannually	Condition satisfied, monitoring conducted on 6 May and 19 November 2020
49	Dust monitoring	Following receipt of dust complaint, as required	Not triggered
50	Traffic Monitoring	Monthly	Ongoing basis
60	Independent Environmental Audit	Annually	Condition satisfied audit conducted in November 2020
91	Meteorological monitoring	Continuous (15 minute intervals)	Ongoing basis

117	Pest and Vermin Inspections	Quarterly	Ongoing basis
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2.1.1 Meteorology

Veolia operates an automated onsite weather station (Campbell Scientific Model CR800) to continuously log meteorological data, in accordance with Consent Condition 91. This allows sampling and analysis of the parameters specified in **Table 2.2** below, along with standards and statutory requirements to collect and record this data.

Table 2.2 - Meteorological data parameters and performance measures

Parameter	Performance Measure	Standards	Statutory Requirement
Wind Speed	Data correlated with other environmental monitoring results for Terminal operations and complaint resolution	AM-2 & AM-4	Consent Condition 91
Wind Direction		AM-2 & AM-4	
Sigma Theta		AM-2 & AM-4	
Temperature		AM-4	
Rainfall		AM-4	
Solar Radiation		AM-4	
Evaporation		Penman-Monteith method	

Captured meteorological data provides a general understanding of the ambient air conditions at the Terminal, which in turn allows us to use this data within investigations of potential odour and dust complaints as well as other environmental incidents. Justification for the collection of specific meteorological data is provided below.

Wind Speed, Wind Direction and Sigma Theta

Wind speed, direction and sigma theta (which are used to calibrate turbulence) are logged at 15-minute intervals, the data from which is used to respond to odour and noise complaints, on receipt.

Temperature and Solar Radiation

In combination with wind speed, temperature and sunlight (solar radiation) play an important role in odour and dust emission modelling to predict airflow patterns and atmospheric stability. In the event that a complaint is received, these parameters would be used to conduct assessments to identify whether adverse air quality impacts can be attributed to operations at the Terminal.

Evaporation

Evaporation measures the extent of vaporisation of a liquid into gaseous phase. Water molecules are small and highly polar which can bind to many substances including odorous gases and dust particles. Therefore, evaporation can be used to conduct dispersion modelling in the event of an odour/or dust complaint.

Rainfall

Rainfall data is measured and recorded at 15-minute intervals at the Terminal to provide an understanding of rainfall patterns and to highlight significant rainfall events. Rainfall generally affects the emissions of dust and odours, as it is able to wash particulate matter and dissolves gaseous pollutants out of the atmosphere. Given this, rainfall data is utilised within responses to odour and/or dust complaints.

In addition, the intensity and duration of stormwater events at the Terminal can be used to assess the performance of the stormwater management system.

A summary of monthly rainfall and evaporation rates, as well as minimum and maximum monthly temperatures at the Terminal during this reporting period is presented below in **Figures 2.1** and **2.2** respectively.

Overall, the average rainfall for the Terminal during this reporting period was recorded at 104.08mm per month.

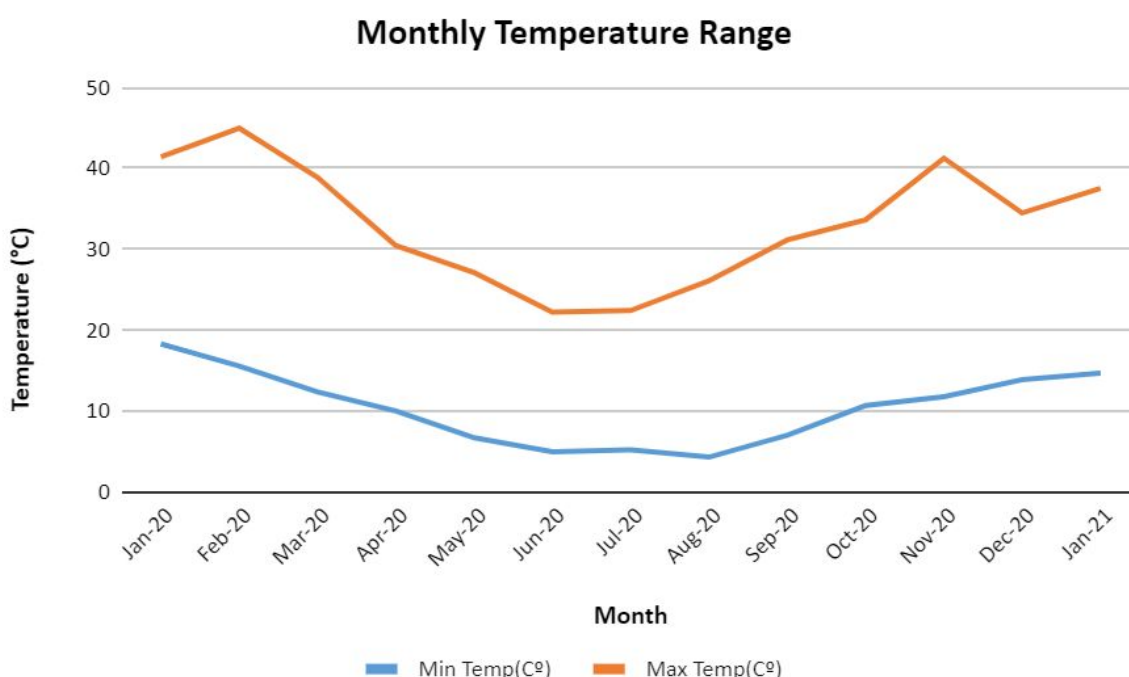


Figure 2.1 - Average Monthly Temperature rates at the Terminal

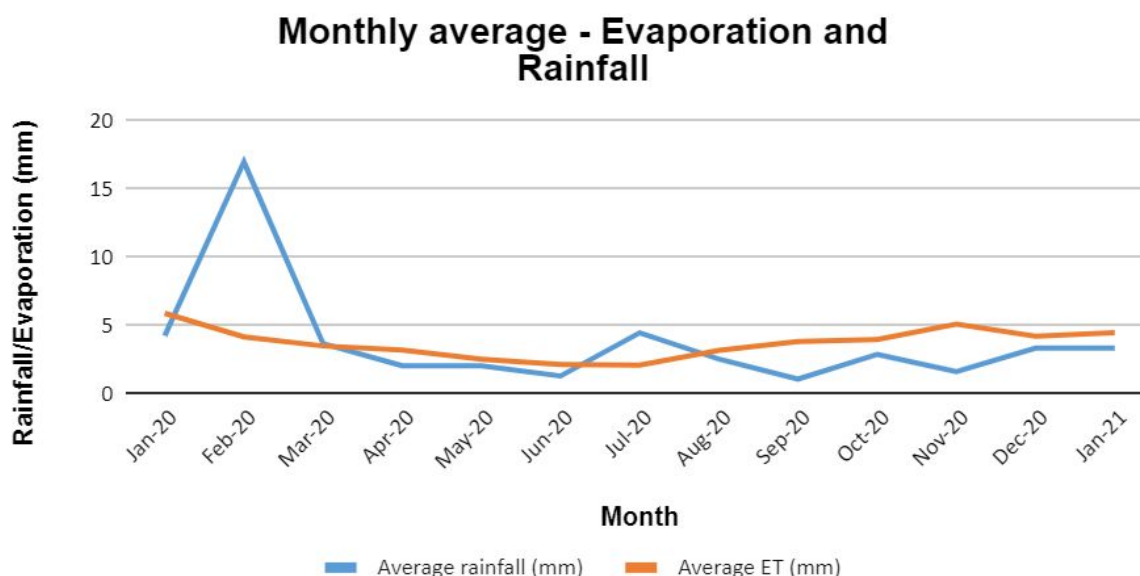


Figure 2.2 - Average Evaporation and Rainfall rates at the Terminal

During the reporting period, no non-compliances relating to the collection of meteorological data occurred.

Servicing and calibration of the meteorological station was successfully carried out quarterly by Hydrometric Consulting Services (HCS). Calibration records for the months of February, May, August and November 2020 can be found in **Appendix D1**.

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

To manage dust, Veolia utilises and maintains a dust suppression system in the waste shed. Further controls for areas within close proximity of the waste shed are regularly maintained with the use of the road sweeper and general housekeeping.

In accordance with Consent Condition 49, following the receipt of any dust related complaints, investigations would be undertaken to monitor or implement additional measures aimed to mitigate identified dust impacts on residential or commercial areas, associated with the operation of the Terminal. The NSW EPA (2017) air quality parameters that would be measured to determine dust emissions, are provided in **Table 2.3**.

Table 2.3 - NSW EPA air quality impact Dust assessment criteria

Parameters	Performance Measure	Standards	Statutory Requirement
Total Suspended Particulates (TSP) - Annual Average	90µg/m3	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW	Consent Condition 49
Deposited Dust (DD) - Incremental	2 g/m2/month		
Deposited Dust (DD) - Cumulative	4 g/m2/month		

No dust complaints were received during this reporting period therefore monitoring requirements were not triggered.

2.2.2 Odour

The requirements of Consent Conditions 48(e) and 77 are to ensure site operations meet the EPA's odour goal of less than 2 odour units (OU) at the nearest sensitive receiver (Refer to **Table 2.4**).

Table 2.4 - Odour Emission Performance Criteria

Parameter	Performance Measure	Standards	Statutory Requirement
Odour Emissions	2 OU	German Standard VDI 3940 "Determination of Odorants in Ambient Air by Field Inspections"	Consent Condition 48E

To achieve this goal, the Terminal operates an air extraction system within the Terminal's 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 the air exhaust vents.

NSW Resource Recovery Annual Environmental Management Report - Clyde Transfer Terminal

Issue Date 15/03/2021

In accordance with Consent Condition 48, the performance of odour control and ventilation equipment is assessed in biannual odour audits which were conducted by the Odour Unit PTY LTD. Records of the May and November 2020 odour audits are provided in **Appendix D2. Table 2.5** below provides a summary of the odour audit results.

The odour audits were conducted using the ranking scale stipulated within the German Standard VDI 3940 "Determination of Odorants in Ambient Air by Field Inspections". The standard ranking system is based on the following seven-point intensity scale, as follows:

VDI 3940	Intensity Scale
0	Not Detectable
1	Very Weak
2	Weak
3	Distinct
4	Strong
5	Very Strong
6	Extremely Strong

Table 2.5 - Summary of Odour Audit Results 2020

Assessment Location	Wind Direction	06/05/20	Assessment Location	Wind Direction	19/11/20
1 - Offsite (Auburn Residential)	WNW	0	1 - Onsite (North-West)	NW	0
2 - Offsite (Auburn Residential)	NW - NNW	0	2 - Onsite (East)	NNW - WNW	0
3 - Offsite (Auburn Residential)	NW	0	3 - Onsite (South-East)	NW	0
4 - Offsite (Auburn Residential)	NW	0	4 - Offsite (Clyde/Auburn Residential)	Calm	0
5 - Offsite (Auburn Residential)	NW - NNW	0	5 - Offsite (Auburn Residential)	NW	0
6 - Offsite (Auburn Residential)	NW - NNW	0	6 - Offsite (Auburn Residential)	NW	0

			7 - Offsite (Auburn Residential)	NW	0
			8 - Offsite (Auburn Residential)	NW	0

Odour audits undertaken on the 6th of May and 19th of November, detected 0 odorants in the Field Ambient Odour-Assessments.

The results of the two odour audits indicate the Terminal complies with Consent Condition 48(e), which states that odour at the Terminal shall not exceed 20U at the nearest receiver.

The Terminal continues to meet the requirements of the *Technical framework: assessment and management of odour from stationary sources in NSW (DEC, November 2006)*. Veolia also maintains a thorough housekeeping regime, combined with odour management controls, which help to minimise the likelihood of odour impacts on surrounding neighbours/receivers.

No odour complaints were received during this reporting period.

2.3 Noise Monitoring

Table 2.6 lists the parameters, respective performance measures, standards and statutory requirements for background noise levels and vehicle emissions limits.

Table 2.6 - Noise Monitoring Requirements

Parameter	Performance Measure (dB(A))	Standards	Statutory Requirement
Day - LAeq (15 minute)	44,40,41	Noise Management	EPL Condition L3.1
Evening - LAeq (15 minute)	38,38,39		
Night - LAeq (15 minute)	39,38,39		
Night - LA1 (15 minute)	56,54,52		
Vehicle Emissions	89	Australian Design Rule (ADR) 28/01	Consent Condition 112

Noise monitoring was undertaken at the Terminal to ensure that waste vehicles entering the Terminal are not emitting nuisance noise emissions.

2.3.1 Truck Noise Monitoring

The truck noise monitoring was undertaken on the 21st of September 2020 in accordance with Consent Condition 112 for this reporting period. Noise levels of 119 truck movements out of a daily total of 297 truck movements were measured, equivalent to 40.07% of truck movements. A

summary of the results is illustrated in **Figure 2.3**. Further details regarding truck movements at the site is discussed in **Section 2.4.1**.

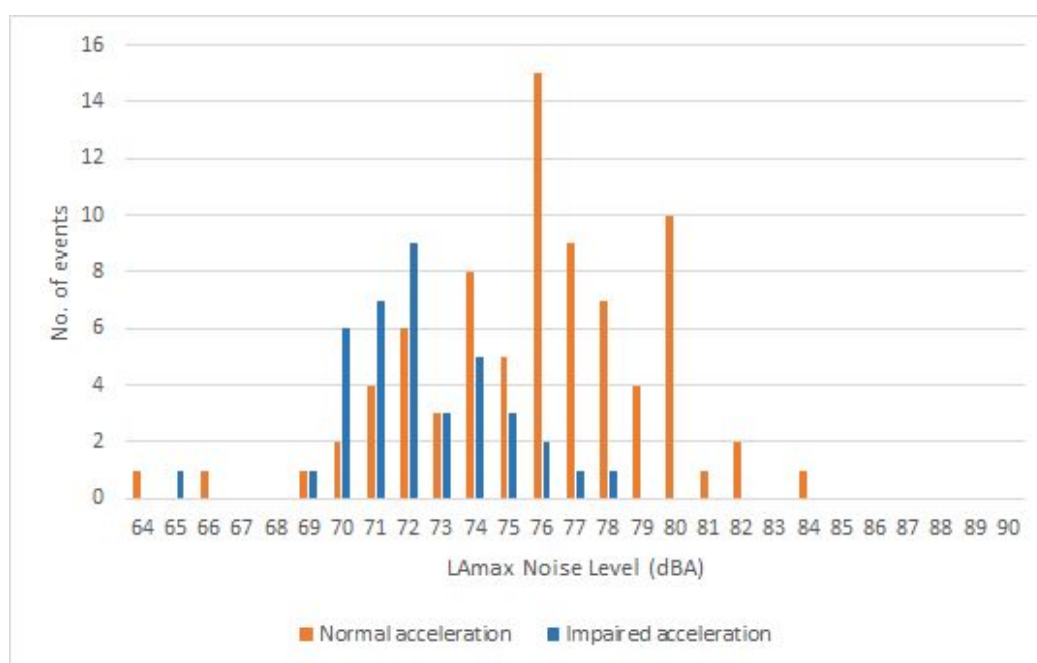


Figure 2.3 -Noise level distribution from Truck Noise Monitoring – 21 September 2020

All trucks monitoring were between 64dBA to 84dBA, and fell within or below the thresholds of 81dBA to 87dBA for Heavy Goods Vehicles with a GVM > 12 tonne in accordance with the Australian Design Rules (ADR) 28/01

There were no registered noise complaints from either industrial or residential neighbours throughout this reporting period.

2.4 Traffic Monitoring

2.4.1 Traffic Movements

Vehicle movements at the Terminal during this reporting period totalled at 81,659 as summarized in **Table 2.8** below.

Table 2.8 - Traffic movements per month for 2019/2020 & 2020/2021 reporting periods

Monitoring Period	2019/2020 Truck Movements	2020/2021 Truck Movements
15 to 31 January 2020	4,201	4,063
February	6,902	6,821
March	7,180	7,168

April	7,243	6,432
May	7,486	6,256
June	6,657	6,614
July	7,741	6,846
August	7,395	6,233
September	6,933	6,917
October	7,525	7,099
November	7,077	6,833
December	7,317	7,290
1 to 14 January 2021	3,093	3,087
TOTAL	86,750	81,659

No noise or odour complaints were received during this reporting period which demonstrates that the movements of trucks at the Terminal did not contribute to any significant noise/odour impacts to the surrounding environment.

2.4.2 Traffic Infringements

As part of Development Modification 5, Condition 119 was modified to enable waste vehicles to turn right from Parramatta Road following the completion of intersection upgrade works. Veolia has been liaising with Roads and Maritime Services and Council to progress these works.

Due to the inability to maintain full compliance with condition 119, a modification was sought and approved by DPIE in 2019. Intersection upgrade works at the entrance of the Terminal will enable waste vehicles to turn right from Parramatta Road into the facility. Veolia has been liaising with Roads and Maritime Services and Cumberland Council to progress these works. No construction activities were able to be planned or completed in 2020 due to COVID-19.

In the interim, Veolia continues to implement mitigation measures including ongoing spot monitoring of vehicle movements as described in the TMP.

2.5 Waste Monitoring

The Waste Management Plan (WMP), which forms part of the OEMP, was prepared for the Terminal in accordance with Consent Condition 47, and 62–69, and details the procedures for the acceptance and management of waste at the Terminal.

NSW Resource Recovery Annual Environmental Management Report - Clyde Transfer Terminal

Issue Date 15/03/2021

All waste received at the Terminal is recorded and maintained in the Systems, Applications and Products in Data Processing (SAP) software. The program records vehicle registration, date and time of entry and exit, the gross and tare weight of the vehicle, as well as the nature and origin of waste received by each contractor.

Procedures are in place to reject or separate non-conforming waste upon arrival at the site. These procedures include visual assessments of incoming wastes by weighbridge operators assisted by closed circuit television (CCTV), as well as inspecting the waste as it is unloaded onto the tip floor. No records of non-conforming waste were reported during this reporting period.

Furthermore, data is recorded and tracked for the containers and includes container status, container weight comparisons and carbon filter replacement. This information is maintained daily by Terminal personnel.

2.5.1 Waste Volume Monitoring

The amount of waste accepted at the Terminal in the 2020 calendar year totalled 438,258 tonnes as summarised in **Table 2.9** below.

Table 2.9 - Summary tonnage per month during 2019 and 2020

Monitoring Period	Incoming Waste Volumes 2019 (tonnes)	Incoming Waste Volumes 2020 (tonnes)
January	39,668	37,532
February	36,855	37,410
March	38,080	37,303
April	37,755	33,707
May	38,567	32,701
June	33,895	34,483
July	40,999	36,257
August	38,314	32,729
September	37,426	37,766
October	40,287	38,983
November	37,496	37,698
December	38,710	41,689
TOTAL	458,053	438,258

Table 2.9 indicates that during the 2020 calendar year there was a decrease in waste by 19,795 tonnes compared to the 2019 calendar year. This demonstrates the Terminal operated within the annual waste limit as stipulated within Consent Condition 10.

2.6 Pests and Vermin

Pests and vermin management is undertaken at the Terminal to ensure that the control measures implemented to minimise the potential for birds, rodents, flies and other pests, remain effective. The primary means of controlling pest and vermin activity is through good housekeeping measures, daily inspections, and quarterly pest control services. **Table 2.10** below identifies the housekeeping undertaken at the Terminal to manage pest and vermin.

Table 2.10 - Pest and Vermin Management

Parameter	Performance Measure	Standard	Statutory Requirement
Litter and Odour Control	Visual Inspection and housekeeping	Veolia Business Management System	Vermin and Pest Control Plan- Consent Conditions 51, 115-117
Vermin Habitat			

Pest control was undertaken by Expert throughout this reporting period. In addition, inspections are undertaken on a routine basis by the Terminal's operators, as part of general housekeeping and recorded on relevant housekeeping and inspection checklists.

The checklists provides a record of the visual monitoring undertaken at the Terminal and provides opportunity to identify where additional corrective actions may need to be applied.

During the quarterly pest and vermin control services this reporting period, the external contractor inspected and treated all internal, external areas of the waste shed and site facilities for cockroaches, ants, spiders and rodents. These areas were treated with Roban rodent bait and Cislin 25 spray respectively. The reports can be found in **Appendix D4**.

During the 2020 IEA, the auditors found that Veolia has taken all suitable measures to minimise the attraction and infestation of vermin and pests on site.

2.7 Community Consultation

Under Condition 134 the Terminal is required to establish and maintain a Community Consultative Committee (CCC). This is to ensure the Committee may make comments and recommendations about the Terminal's development, management and environmental plans.

During this reporting period, due to a continued lack of interest from the community to form a CCC, Veolia submitted a letter to DPIE with the following alternative methods:

- Publishing the community information phone line and email address on the Veolia's company website on a page dedicated to the Terminal for all stakeholders to make enquiries, complaints or to seek more information.
- Inviting community members to an Open Day at the Terminal
- Creation of an email distribution list to engage with interested stakeholders on a routine basis communicating updates on activities on site.
- Sending the Terminal's Annual Environmental Monitoring Reports (AEMR) to Council.

In June 2020, DPIE accepted Veolia's proposed alternative methods of engaging with the community as a more effective and appropriate form of consultation. Since the approval to use the alternative methods mentioned above, there has been no incoming communication through the community information phone line and email address. In addition, Veolia contacted interested stakeholders to ask whether they would like to receive site updates. The first site update was sent out in March 2021.

As COVID-19 restrictions are continuing to ease in NSW, Veolia is currently seeking interest from the local Clyde community to attend a dedicated site tour in April 2021. Details of the tour will be reported in the next AEMR.

3. Environmental Performance

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

An IEA of the Terminal's environmental performance was carried out in November 2020 by Epic Environmental. The objective of this IEA was to assess the environmental performance of the Terminal and identify any non-compliances against environmental approval issued to the Terminal, as required by Condition 6 of the Consent, the status of each condition of the consent can be found in the Development of Consent table provided in **Appendix B**.

A discussion of the non-compliances identified by the IEA, as well as the corrective actions, where implemented, is provided within this section. A comparison is also made to the non-compliances/regulatory actions and corrective actions implemented in the previous reporting period to present the changes to the environmental performance of the Terminal.

3.1 Previous Non-Compliances

One non-compliance was identified during the 2019 reporting period and is detailed in **Table 3.1** below, the status of corrective actions to resolve/manage the non-compliance is also provided.

Table 3.1 - Non-compliances and observations against the Consent in the 2019 reporting period

Consent Condition	Non-compliance/ Observations	Corrective Action and Evidence	Status and Date Completed	Person/Team Responsible
119	Non-compliance relating to the restriction on waste vehicles turning right from Parramatta Road into the Site.	Ongoing measures include a new driver's induction program to educate drivers on correct procedures for entering the site, which commenced in May 2018. Along with a traffic survey to assess compliance.	Completed (March 2019) Part of Development Modification 5 approved by the DPIE, this modified condition will enable vehicles to turn right off Parramatta Road into the Site following the completion of road intersection upgrade works. Veolia has been liaising with Roads and Maritime Services and Council to progress these works.	Facility Manager - NSW Resource Recovery

3.2 Current Non-Compliances

Three non-compliances were identified during the 2020 reporting period and are detailed in **Table 3.2** below, the status of corrective actions to resolve/manage the non-compliance is also provided.

Table 3.2 Non-compliances against the Consent in the 2020 reporting period

Consent Condition	Non-compliance	Corrective Action and Evidence	Status	Person/Team Responsible
Condition 50	<p>The TMP was reviewed and largely addressed the consent condition, with the exception of Veolia not having:</p> <ul style="list-style-type: none"> - Implemented an enforcement program including the imposition of identified punitive measures against any driver or vehicle owner whenever the above restrictions are breached. - Defined contracts with waste transporters that include conditions addressing entry and exit restrictions and permissible waste transport routes and punitive measures for non-compliances. - Measures to minimise trucks and other heavy vehicles from entering or exiting the premises between 	<p>Prepare and lodge a modification to the development consent that removes the requirement for Veolia to enforce punitive measures to non-conforming customers.</p> <p>As part of the modification Veolia will apply for a revised condition that requires Veolia to provide further training with offending drivers and remove access authorisation for drivers that are repeat offenders</p>	Veolia has requested a meeting with the DPIE to seek a resolution to this matter and is currently awaiting a response.	Operations Project Manager - NSW Resource Recovery / EMR

NSW Resource Recovery Annual Environmental Management Report - Clyde Transfer Terminal

Issue Date 15/03/2021

	the hours: 10pm and 5am Mondays to Saturdays; 10pm and 7am Sundays and public holidays			
Condition 126 (c)	The Emergency Response Plan was reviewed as part of the IEA and the document largely addressed the requirements of the condition with the exception of an estimate of the cost of implementation	Update the emergency response plan to include an annual cost estimate for implementation of the plan	Veolia is in the process of updating the Emergency Response Plan (ERP) to include the annual cost estimates for implementation of the ERP.	Graduate Environmental Engineer
Condition 136	The condition requires Veolia to establish and maintain a trust fund to facilitate the functioning of the Community Consultative Committee. During the audit it was determined Veolia had not established such a fund. Whilst it is understood a community consultative committee has not been able to be established, the requirement for payment to a trust fund as required by this condition has not been removed. Therefore Veolia has not demonstrated reasonable compliance with this condition.	Prepare and lodge a modification to the development consent that removes the requirement for Veolia to establish and maintain a trust fund for a Community Consultative Committee that could not be established.	Veolia has requested a meeting with the DPIE to seek a resolution to this matter and is currently awaiting a response from DPIE.	Operations Project Manager - NSW Resource Recovery / EMR

3.3 Opportunities for Improvement

A total of nine opportunities for improvement were identified during the 2020 IEA. The opportunities for improvement are detailed in **Table 3.3** below.

Table 3.3 Recommendations for Opportunities for Improvements for the 2020 reporting period

Consent Condition	Recommendation	Proposed Actions	Status	Person/Team Responsible
Condition 57	Write to the DPI&E and seek written approval for the monitoring consultant (the Odour Unit) as required under condition 57.	Submit a letter to DPI&E, requesting a written approval for the odour monitoring consultant (TOU).	Incomplete - to be completed in the next reporting period	Environmental Management Representative - NSW Resource Recovery
Condition 87	Prepare and lodge a modification to the development consent that removes the requirement for monitoring of the forced ventilation system in accordance with the EPL. As EPL 11763 does not require monitoring of the forced ventilation system, condition 87 should be updated to remove any ambiguity.	Lodge a modification to remove the development consent that removes the requirement for monitoring the forced ventilation system, as EPL does not require monitoring of the forced ventilation system.	Incomplete - to be completed in the next reporting period	Environmental Management Representative - NSW Resource Recovery
Condition 113	Develop and implement a process to undertake annual verifications of driver induction training completion. The process could be in the form of annual checks of all drivers against training records provided by the customer	Develop and implement a process to undertake annual verifications of driver induction training completion.	Incomplete - to be completed in the next reporting period	Facility Manager - NSW Resource Recovery Environmental Management Representative - NSW Resource Recovery
Condition 114	Prepare and lodge a modification to the development consent that replaces the requirement for Veolia to undertake	Lodge a modification to replace the development consent that replaces the	Incomplete - to be completed in the next reporting period	Environmental Management Representative - NSW Resource Recovery

NSW Resource Recovery Annual Environmental Management Report - Clyde Transfer Terminal

Issue Date 15/03/2021

	training with rail operators and change this to a requirement for Veolia to verify the existing training programs provided by the rail operators are suitable to minimise the risk of nuisance being caused to neighbouring properties.	requirement for Veolia to undertake training with rail operators and change to verify the existing training programs provided by the rail operators.		
Condition 130, 131 and 132	As the previous Auburn Council has now amalgamated into Cumberland City Council, Veolia should re-engage with the current Council with regards to Condition 130, 131 & 132. Specifically, Veolia should identify whether there is any interest from the Council to collaborate on a Duck Creek Riparian Zone improvement project.	Veolia has submitted a letter and awaiting response from Council	In progress - Veolia is currently awaiting response from Council	Facility Manager - NSW Resource Recovery Environmental Management Representative - NSW Resource Recovery
S4.3.2 of the OEMP	List of interested parties (i.e., stakeholders) contact details should be prepared for the site. At a minimum this should include: <ul style="list-style-type: none"> - All neighboring properties; - Relevant local community members; - Respondents to the development consent modifications; and - The Local Councilor. These parties should be invited to any community open day	Completed	Completed	Environmental Management Representative - NSW Resource Recovery
S5.1.2 of the OEMP	Remove any	Completed	Completed	Environmental

NSW Resource Recovery Annual Environmental Management Report - Clyde Transfer Terminal

Issue Date 15/03/2021

	reference to Auburn Council across the OEMP and associated sub-plans.			coordinator - NSW Resource Recovery
S5.2 of the OEMP	Prepare and implement a formal management review process in accordance with s5.2 of the OEMP.	Prepare and implement a formal management review process in accordance with s5.2 of the OEMP	Incomplete - to be completed in the next reporting period	Environmental coordinator - NSW Resource Recovery
S4.1 of the Dust Management Plan	Update s4.1 of the Dust Management Plan to remove the requirement for certain adverse weather conditions to trigger a risk assessment. Existing mitigation measures are considered suitable for management of dust risks from the site.	Completed	Completed	Environmental coordinator - NSW Resource Recovery

3.4 Complaints

The Veolia company website contains a general enquiries line whereby a complaint can be lodged and directed to the relevant facility. These contact details are also provided on-site via signage erected at the entrance of the Terminal.

Complaints (either written or verbal) are documented to record the following:

- Nature and extent of the complaint;
- Method by which the complaint was made;
- Name and address of the person lodging the complaint (the complainant);
- Details of all related factors including location, dates, frequency, duration, site conditions and effects of the complaint; and
- Action taken to address the complaint including follow up contact with the complainant.

No complaints were received during this reporting period.

Details of nominated personnel relevant to the complaints handling process for the Terminal are provided in **Table 3.3** below.

Table 3.3 - Details of the Terminal's nominated personnel

Contacts Name	Position
Steve Lawrence	Sydney Facilities Operations Manager
Rod Jones	Clyde Facility Manager
Sara Maddison	Operations Project Manager / Environmental Management Representative
Sioi Matele	Site Leading Hand

3.5 Conclusion

A performance review of the Terminal between 2019 - 2020 reporting periods and the outcome of the IEA indicates that some administrative non-compliances need to be addressed, but overall the Terminal operations are satisfying the requirements of the Consent.

Veolia will address the IEA audit recommendations and implement them as appropriate to improve its environmental compliance performance against the Consent.

Terms and Definitions

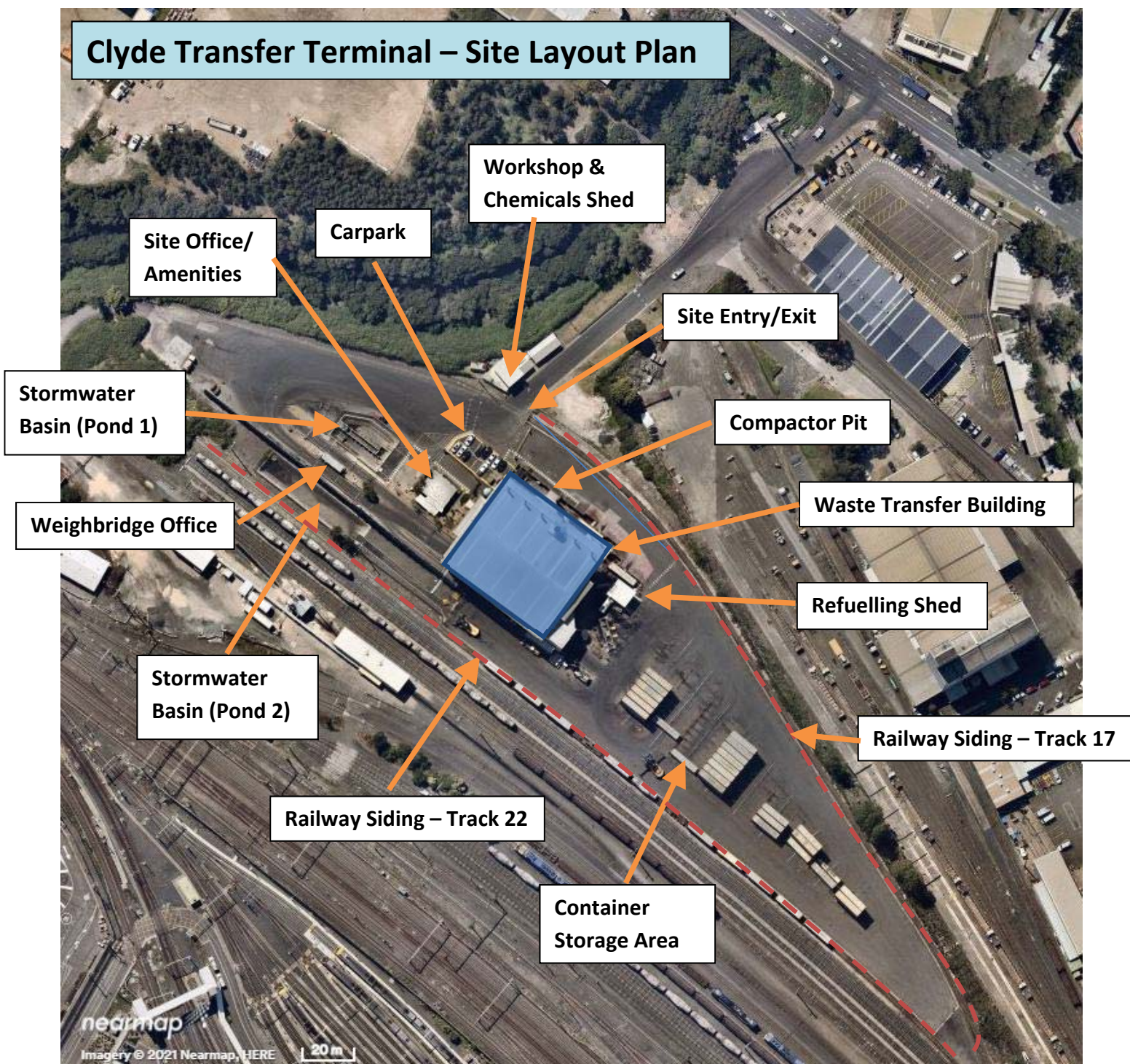
Term	Definition
AEMR	Annual Environmental Management Report
Consent	Development Consent DA 205-08-01(and subsequent modifications)
DPIE	Department of Planning, Industry and Environment
EMR	Environmental Management Representative
EPA	NSW Environment Protection Authority
EPL	Environment Protection Licence
IEA	Independent Environmental Audit
OEMP	Operational Environmental Management Plan
Rivo Safeguard	Veolia's online system for reporting and managing incidents, recording audits and regulator enforcement information
SHEQ	Safety Health Environment Quality
TOU	The Odour Unit PTY LTD
The Terminal	Clyde Transfer Terminal
TPA	Tonnes per annum
TMP	Traffic Management Plan
Veolia	Veolia Australia and New Zealand
WMP	Waste Management Plan

Reference Documents

Document Name
DEC (2006). <i>Technical framework: assessment and management of odour from stationary sources in NSW</i> , Department of Environment and Conservation. November 2006
NSW EPA (2014). <i>NSW Waste Classification Guidelines</i> , NSW Environmental Protection Agency. January 1996.
NSW EPA (2017). <i>Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales</i> . January 2017.
NSW EPA (2000). <i>NSW Industrial Noise Policy (2000)</i> , NSW Environmental Protection Agency. January 2000.
Jackson Environment and Planning (2019). <i>Clyde Transfer Terminal Independent Environmental Audit 2019 (DRAFT)</i> . Jackson Environment. November 2019
Veolia (2020). <i>Clyde Transfer Terminal Annual Environmental Monitoring Report</i> . Veolia. March 2020.

Appendix A - Site Location Plan

Clyde Transfer Terminal – Site Layout Plan



Appendix B - Conditions of Development Consent Compliance Table

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
	General Conditions				
1	<p>Development shall be carried out in accordance with:</p> <p>(a) DA No. 205-08-01;</p> <p>(b) the EIS prepared for the "Clyde Transfer Terminal" by Maunsell McIntyre Pty Ltd, dated 14 August 2001;</p> <p>(c) the Supplementary EIS prepared for the "Clyde Transfer Terminal" by Maunsell McIntyre Pty Ltd, dated 18 December 2001;</p> <p>(d) all additional information supplied by the Applicant or the Applicant's consultants or subconsultants to the Department or integrated approval bodies pertaining to the development, including:</p> <ul style="list-style-type: none"> · Noise Mitigation Details provided to the EPA by Vipac Engineers & Scientists Ltd by facsimile dated 15 February 2002; · Stormwater Outlet Design, dated 18 February 2002, provided to the Department by Maunsell Australia Pty Ltd; · Information on traffic, odour and noise, dated 9 April 2002, provided to the independent assessor Mr John Court by Maunsell Australia Pty Ltd; · Information on the construction EMP, stormwater drainage, site contamination, landscaping and rehabilitation of Duck River, and the property boundary, dated 10 April 2002, provided to Waterways Authority by Maunsell Australia Pty Ltd; · Information on odour management, Duck River cycleway, and traffic management, dated 10 April 2002, provided to the independent assessor Mr John Court by Maunsell Australia Pty Ltd; · Information on the property boundary, dated 17 April 2002, provided to Waterways Authority by Maunsell Australia Pty Ltd; · Information on modifications to pipeline, pipe outlet, scour protection works, detention basin, weighbridge and noise barrier, dated 19 April 2002, provided to Waterways Authority by Maunsell Australia Pty Ltd; · Information on a proposed community consultative committee and possible community enhancement projects, dated 4 June 2002, provided to the Department by the Applicant; · Information on Parramatta Road plans and odour control procedure, dated 12 June 2002, provided to the Department by Maunsell Australia Pty Ltd; and · Information on odour management, dated 4 July 2002, provided to the Department by the Applicant <p>(e) Modification application MOD-133-11-2006, accompanied by Statement of Environmental Effects Modification to the Terminal Building Forced Ventilation Sydney Clyde Waste Transfer Station, prepared by Environ and dated October 2006, the Odour Mitigation Study Clyde Waste Transfer Terminal Addendum to Final Report, prepared by the Odour Unit and dated July 2006, and Veolia Environmental Services' letter (and attachments) to the Department of Planning dated 15 February 2007,</p> <p>(f) modification application DA-205-08-01-MOD-2 and;</p> <p>(g) modification application DA-205-08-01-MOD-3 and accompanying letter dated 14 December 2009</p> <p>(h) modification application DA-05-08-01-MOD-4 and accompanying Environmental Assessment letter prepared by Veolia Environmental Services (Australia) Pty Ltd and dated 20 January 2014.</p> <p>(i) modification application DA-05-08-01-MOD-5 and accompanying Environmental Assessment prepared by SG Haddad</p>	C	The findings of this audit	The audit did not identify any major issues that would indicate non-compliance with this condition.	
2	<p>In the event of any inconsistency between;</p> <p>(a) the conditions of this consent and any document listed from condition 1(a) to 1(g) inclusive, the conditions of this consent shall prevail to the extent of the inconsistency; and</p> <p>(b) any document listed from condition 1(a) to 1(g) inclusive, the most recent document shall prevail to the extent of the inconsistency</p>	NT		This is a note only not auditable	
2A	<p>The Proponent shall comply with any reasonable requirements of the Planning Secretary arising from the Department's assessment of;</p> <p>(a) any reports, plans, programs, strategies or correspondence that are submitted in accordance with the conditions of this approval; and</p> <p>(b) the implementation of any actions or measures contained in these reports, plans, programs, strategies or correspondence.</p>	NT		Not relevant to the current audit period	
2B	<p>The Proponent shall prepare revisions of any strategies, plans or programs required under this approval if directed to do so by the Planning Secretary. Such revisions shall be prepared to the satisfaction of, and within a timeframe approved by, the Planning Secretary</p>	NT		This is a note only not auditable	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
Compliance					
3	It shall be the ultimate responsibility of the Applicant to ensure compliance with these conditions	C	The findings of this audit	The audit did not identify any major issues that would indicate non-compliance with this condition.	
4	The conditions do not relieve the Applicant of the obligation to obtain all other approvals and licenses from all relevant authorities required under any other Act.	NT		This is a note only not auditable	
5	The Applicant shall comply or ensure compliance with all the requirements of the Director-General in respect of the implementation of any measures arising from these Conditions.	NT		This is a note only not auditable	
6	The Applicant must bring to the attention of the Director-General any matter that may require further investigation, or the issuing of instructions from the Director-General, to enable compliance with these Conditions. The Applicant shall comply or ensure compliance with any instruction issued by the Director-General to enable compliance with these Conditions.	C	None	Veolia advised there have been no issues identified by the Director General during the audit period.	
7	Where the results of any monitoring demonstrate an exceedance of a limit in this consent, the Applicant shall provide, within 30 days of the monitoring, the monitoring results to the Director-General and Auburn Council stating: (a) The reason for the exceedance; (b) Action taken to ensure the limit is not exceeded in the future; (c) Proposed action to ensure the limit is not exceeded in the future; (d) Timetable for implementing the proposed action in (c); and (e) Results of additional monitoring which has been conducted within 7 days of the action taken in (b) and (c) above, to demonstrate compliance with the limit.	C	Odour Audits, Odour Monitoring Results.	Based on a review of monitoring results no exceedances were identified during the audit period.	
Waste Volumes					
8	No waste shall be received at the development except waste to be transported by rail from Clyde to the Crisps Creek Intermodal Facility for disposal or treatment at Woodlawn.	C	Waste Records During Site Inspection	It was confirmed during the audit all waste received on the site is transported to Woodlawn. The exception to this is small quantities of non-conforming waste (gas bottles or large steel) which is sent to other facilities.	
9	Condition was deleted - Mod 4	NT		Condition has been removed	
10	The Proponent must ensure that no more than 600,000 tonnes per annum of waste is received at the development in any calendar year.	C	Annual Environmental Management Report - Clyde Transfer Terminal 2019	The waste records for 2019 show that 458,053 tonnes of material were processed at the facility.	
10A	The Proponent must ensure that no more than 500 tonnes of waste is present on the terminal floor at any one time, except under the limited circumstances detailed in the Operational Contingency Management Plan for the development, required by condition 54A and approved by the Development Secretary.	C	Site Inspection	At the time of inspection less than 500 T was observed on the terminal floor. Spot checks observed during the audit, demonstrated the terminal floor is consistently below 500T.	
Fit and Proper Person					
11	The applicant must, in the opinion of the EPA, be a fit and proper person to hold a licence under the Protection of the Environment Operations Act 1997, having regard to the matters in s.83 of that Act.	C	Environment Protection Licence (EPL)	The EPA has issued an EPL thereby deeming the Licensee a fit and proper person to hold a licence.	
Obligation to Prevent and Minimise Harm to the Environment					
12	The Applicant is to take all practicable measures to prevent and minimise harm to the environment as a result of the Development.	C	Site inspection	No apparent unauthorised environmental harm was observed during the audit.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
13	If at any time the Director-General is made aware of the occurrence of any impact from the project that poses serious environmental or amenity concerns, and is due to the failure of measures required by these Conditions or those measures identified in the documentation referred to in Condition 1 to ameliorate the impact, the Director-General may request the Applicant to cease the activities causing the impact.	C	None	Veolia advised that no issues have been identified by the DG during the audit period (unable to verify this during the audit). Reviewed the online incident system (Sphere) and only a single minor incident was observed in the last 2 years.	
14	The Applicant may recommence the activities that were ceased, upon written advice by the Director-General that those concerns have been satisfactorily addressed.	NT		Not relevant to the current audit period	
Date of Commencement					
15	The date of commencement shall be the date that the Applicant determines to proceed with the development. The Applicant must provide the date of commencement in writing to the Director-General before commencement of the development.	NT		Not relevant to the current audit period	
Pre-Construction Compliance Report					
16	At least two weeks prior to commencement of construction (or within such period as otherwise agreed in writing by the Director-General), the Applicant shall submit to the Director-General a report detailing the level of compliance with each Condition of this Consent that relates to pre-construction activities. The report shall include, but not necessarily be limited to: (a) the identification of each relevant Condition (b) the details of any study or report required by the relevant Conditions (c) the level of compliance with each relevant Condition (d) the reasons for any non-compliance (e) any action taken or proposed to make good any non-compliance, and (f) any action taken or proposed to implement the recommendations made in any study or report required by the relevant Conditions	NT		Not relevant to the current audit period	
Pre-Operation Compliance Report					
17	At least one month prior to the receipt of uncontainerised waste at the premises (or within such period as otherwise agreed in writing by the Director-General), the Applicant shall submit to the Director-General a report detailing the level of compliance with each Condition of this Consent that relates to pre-operation activities. The report shall include, but not necessarily be limited to: (a) identification of each relevant Condition (b) the details of any study or report required by the relevant Conditions (c) the level of compliance with each relevant Condition (d) the reasons for any non-compliance (e) any action taken or proposed to make good any non-compliance, and (f) any action taken or proposed to implement the recommendations made in any study or report required by the relevant Conditions	NT		Not relevant to the current audit period	
Dispute Resolution					
18	The Applicant shall endeavour to resolve any dispute arising out of the implementation of these Conditions.	C	None	Veolia advised there have been no disputes related to the conditions during the audit period (unable to be verified during the audit).	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
19	For any unresolved dispute arising out of the implementation of these Conditions between the Applicant and a public authority, company or person (but excluding any dispute between the Applicant and its contractors and/or subcontractors engaged in the construction or operation of the development), in the first instance either party can refer the matter to the Director-General for resolution and, if not resolved, to the Minister. The Minister's determination of the disagreement shall be final and binding on all parties.	C	None	Veolia advised there have been no disputes related to the conditions during the audit period (unable to be verified during the audit).	
Monitoring Records					
20	The results of any monitoring required to be conducted by the Conditions of this Consent or a licence under the Protection of the Environment Operations Act 1997, in relation to the development, must be recorded and retained as specified in this Consent.	C	Environmental monitoring records including noise and odour	All monitoring records are maintained on Veolia's internal drive and were observed for 2019 - 2020.	
21	All records required to be kept by this Consent or an environment protection licence must be: (a) in a legible form, or in a form that can readily be reduced to a legible form; (b) kept for at least 4 years after the monitoring or event to which they relate took place; and (c) provided in a legible form to the Planning Secretary or any authorised officer of the EPA as soon as practicable after request.	C	Environmental monitoring records including noise and odour	Records for 2016 were observed for odour unit.	
22	The following records must be kept in respect of any samples required to be collected: (a) the date(s) on which the sample was taken; (b) the time(s) at which the sample was collected; (c) the point at which the sample was taken; and (d) the name of the person who collected the sample.	C	Odour Audit 2019 - 2020 Annual Truck Noise Measurements	Odour monitoring and truck noise measurement reports addressed the consent condition. ☐	
GENERAL ENVIRONMENTAL MANAGEMENT					
Site Contamination					
23	The applicant shall obtain an environmental report prepared by a site auditor accredited under the Contaminated Land Management Act 1997 to determine the nature and extent of contamination at the site and any investigation and/or remediation necessary before the land is suitable for commercial/industrial use. Prior to construction the Applicant shall obtain written endorsement from the site auditor for the following aspects of the Site Contamination Management Plan: (a) A plan to manage the disturbance of contaminated soil in a manner that protects sub-surface waters from contamination (b) A plan to manage dust during the construction and operational stages in a manner that protects the health of on-site and off-site personnel.	NT		Not relevant to the current audit period	
24	Prior to completion of construction, any amelioration measures required to enable a site audit statement to be issued shall be implemented.	NT		Not relevant to the current audit period	
Environmental Management Plan (EMP) (Construction Stage)					
25	The Applicant shall prepare an EMP (Construction Stage) which is specific to the development.	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
25A	Prior to commencement of construction of the odour control system subject to MOD-133-11-2006, the Applicant shall prepare and obtain approval from the Planning Secretary for a Construction Environmental Management Plan (CEMP) specific to such works. The CEMP, to be submitted to the Planning Secretary and the EPA, shall include (but not necessarily be limited to) measures to be undertaken to minimise environmental impacts during construction with particular emphasis on measures for mitigating odour, dust, noise and traffic impacts on surrounding land uses. The CEMP shall provide details of how the environmental performance of the remediation works will be monitored, what actions will be taken to address identified adverse environmental impacts, and how the relevant requirements of conditions 26 to 38 shall be addressed. The CEMP shall reflect restrictions to construction hours as follows; Monday to Friday from 7am to 6pm, and Saturdays from 8am to 5pm, with no construction work on Sundays and Public Holidays. The CEMP shall be implemented during construction.	NT		Not relevant to the current audit period	
26	The EMP (Construction Stage) shall be prepared in accordance with the Conditions of this Consent, all relevant Acts and Regulations and accepted best practice management procedures.	NT		Not relevant to the current audit period	
27	The Applicant must not commence any works until the EMP (Construction Stage) has been completed and submitted to the Director-General.	NT		Not relevant to the current audit period	
28	The Applicant shall certify the EMP (Construction Stage) as being in accordance with the Conditions of Consent prior to submitting it to the Director-General.	NT		Not relevant to the current audit period	
29	The EMP (Construction Stage) shall be made publicly available.	NT		Not relevant to the current audit period	
30	The EMP (Construction Stage) shall include, but is not necessarily limited to, the following plans: (a) Soil and Water Management Plan (b) Construction Noise Management Plan (c) Dust Management Plan (d) Construction Waste Management Plan (e) Site Contamination Management Plan (f) Landscaping Plan	NT		Not relevant to the current audit period	
31	The Applicant shall address the elements outlined in Attachment 1 of this Consent when preparing the EMP (Construction Stage).	NT		Not relevant to the current audit period	
32	All site personnel (including contractors and subcontractors) during the construction stage must be inducted and trained to ensure compliance with the EMP (Construction Stage).	NT		Not relevant to the current audit period	
33	The Soil and Water Management Plan (SWMP) must describe the measures that will be employed to minimise soil erosion and the discharge of sediment and other pollutants to lands and/or waters during construction activities. The SWMP must be prepared in accordance with the requirements for such plans outlined in Managing Urban Stormwater: Soils and Construction (available from the Department of Housing).	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
34	The Construction Noise Management Plan must address, but is not necessarily limited to, the following issues: (a) compliance standards (b) community consultation (c) complaints handling monitoring/system (d) site contact person to follow up complaints (e) mitigation measures, including details of any noise attenuation measures (f) the design and operation of the proposed mitigation methods demonstrating best practice (g) construction times (h) contingency measures where noise complaints are received (i) monitoring methods and programs.	NT		Not relevant to the current audit period	
35	The Dust Management Plan must include, but not necessarily be limited to, control strategies to achieve compliance with dust emission limits in this Consent and any environment protection licence.	NT		Not relevant to the current audit period	
36	The Construction Waste Management Plan must include, but not necessarily be limited to, strategies to ensure any waste generated during the construction stage is recycled, reused or disposed of in a lawful manner.	NT		Not relevant to the current audit period	
37	The Site Contamination Management Plan must include, but not necessarily be limited to, the following issues that apply to construction stage activities: (a) A plan to manage the disturbance of contaminated soil in a manner that protects sub-surface waters from contamination (b) A plan to manage dust in a manner that protects the health of on-site and off-site personnel.	NT		Not relevant to the current audit period	
38	The Landscaping Plan must include, but not necessarily be limited to: (a) the recommendations of the Visual Assessment Study in the EIS for landscaping and planting of native species, and (b) commitments by the Applicant for an appropriate financial or in-kind contribution towards landscaping the Parramatta Road frontage to soften and screen the access point as viewed from Parramatta Road.	NT		Not relevant to the current audit period	
Environmental Management Plan (EMP) (Operation Stage)					
39	The Applicant shall prepare an EMP (Operation Stage) which is specific to the development.	C	Operational Environmental Management Plan for Clyde Transfer Terminal (OEMP)	The draft OEMP specific to the site was observed.	
40	The EMP (Operation Stage) shall be prepared in accordance with the Conditions of this Consent, all relevant Acts and Regulations and accepted best practice management procedures.	C	Operational Environmental Management Plan for Clyde Transfer Terminal (OEMP)	The Draft OEMP was reviewed and assessed as compliant with the conditions of consent and best management practice.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
41	The EMP (Operation Stage) shall include, but is not necessarily limited to, the following plans: (a) Waste Management Plan (b) Odour Management Plan (c) Dust Management Plan (d) Traffic Management Plan (e) Vermin and Pest Control Plan (f) Stormwater Management Plan (g) Site Contamination Management Plan (h) Incident Response Plan (i) Noise Management Plan (j) Operational Contingency Management Plan	C	Operational Environmental Management Plan for Clyde Transfer Terminal and various sub-plans	The Draft OEMP included the sub-plans required by the consent.	
42	The Applicant shall address the elements outlined in Attachment 1 of this Consent when preparing the EMP (Operation Stage).	C	Operational Environmental Management Plan for Clyde Transfer Terminal and various sub-plans	The draft OEMP addresses the relevant elements in Attachment of the consent.	
43	The Applicant must not accept any uncontainerised waste at the premises until the EMP (Operation Stage) has been approved by the Director-General.	C	Department of Planning Approval of the OEMP dated Feb 2008	Approval of the OEMP published online was observed during the audit.	
44	The Applicant shall certify the EMP (Operation Stage) as being in accordance with the Conditions of Consent prior to seeking approval of the Director-General.	C	The findings of this audit	This audit included a review of the draft OEMP and sub-plans to certify the documents are in accordance with the consent.	
45	All site personnel (including contractors and subcontractors) during the operational stage must be inducted and trained to ensure compliance with the approved EMP (Operation Stage).	C	Induction and LMS training records	Training records for inducted staff members were provided and reviewed and demonstrated a robust training process at Veolia.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
46	The approved EMP (Operation Stage) shall be made publicly available on request to the Applicant.	C	https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station	The approved OEMP was observed to be available on the Veolia website.	
47	<p>The Waste Management Plan must address, but is not necessarily limited to, the following issues:</p> <p>(a) Procedures for inspecting and recording each load of uncontainerised waste received at the terminal and for separating and disposing of any component of the waste that is not permitted to be accepted</p> <p>(b) Priority waste handling given to the most offensive wastes, otherwise “first in/first out” waste handling</p> <p>(c) Procedures for cleaning vehicles before they leave the premises in a manner that prevents the tracking of waste from the premises</p> <p>(d) An education program for all drivers of waste vehicles using the site, about waste types permitted to be received at the premises and the need to ensure their vehicle does not track waste from the premises</p> <p>(e) The inclusion of conditions in contracts with waste transporters addressing acceptable waste types and punitive measures for non-compliances</p> <p>(f) An enforcement program to be maintained for the duration of the development which includes the imposition of punitive measures for delivering unacceptable waste types</p> <p>(g) Procedures for minimising wind blown litter from leaving the premises and for regular patrols of surrounding areas to collect any litter that has been carried from the premises</p> <p>(h) Procedures for preventing washdown waters and any other liquid that has been in contact with waste from entering the stormwater system</p> <p>(i) An operational contingency plan to be implemented in the event of equipment failure, industrial action or other situation that prevents the containerisation of waste that has been in the terminal building in excess of 18 hours</p> <p>(j) Fire management procedures including the management of fire water in a manner that will not pollute waters.</p>	C	Waste Management Plan for Clyde Transfer Terminal	The WMP was reviewed and addressed the requirements of the consent.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
48	<p>The Odour Management Plan must address, but is not necessarily limited to, the following issues:</p> <p>(a) Procedures for the management of waste at the premises at all times to minimise the generation of odours.</p> <p>(b) Protocols for the operation of the odour control mechanisms for the terminal building, including the forced air extraction and odour filtration system, to minimise the risk of any adverse impact on surrounding commercial and residential areas.</p> <p>(c) Procedures for the maintenance and repair of the forced air extraction and odour filtration system on the terminal building, including the replacement of the dust filters and odour adsorption material</p> <p>(d) Criteria to be utilised to determine when the replacement of dust filters and odour adsorption material for the terminal building is to be carried out.</p> <p>(e) An emission monitoring program designed to determine the odour generation rates from the waste in the terminal building and to establish the capture and removal efficiency of the forced air extraction and odour filtration system and appropriate equipment maintenance schedules for replacement of dust filters and odour adsorption material. The program is to include odour emission monitoring using dynamic olfactometry in such a way as to allow determination of the performance of the odour control system with and without each component of the forced air extraction and odour filtration system in operation.</p> <p>(f) An odour audit program which provides for a comprehensive odour audit of the premises and nearby commercial and residential areas, by an independent, appropriately qualified and experienced person, to be conducted 3-monthly for the initial 24 months of receiving uncontainerised waste at the terminal, and 6-monthly thereafter, unless otherwise approved in writing by the Director-General.</p> <p>(g) An operational contingency plan to be initiated in the event of equipment failure, industrial action or any other situation that prevents the containerisation of any waste that has been in the terminal building in excess of 18 hours. Such a plan shall include suspending the acceptance of further uncontainerised waste at the premises.</p> <p>(h) A testing program designed to determine appropriate maintenance schedules for replacement of odour adsorption material in the pressure relief vents of the waste containers.</p> <p>(i) Procedures for the maintenance and repair of the odour adsorption and pressure relief vents of the waste containers, including the replacement of the odour adsorption material; and</p> <p>(j) A community consultation program on odour. The community consultation program may include a community survey, to be developed in conjunction with the community consultative committee.</p>	C	Odour Management Plan for Clyde Transfer Terminal	The OMP was reviewed and addressed the requirements of the consent.	
49	<p>The Dust Management Plan shall include but not necessarily limited to, control strategies to achieve compliance with any dust emission limits in this consent and any applicable environment protection license. The Dust Management Plan shall adopt the recommendations made by Turnkey Environmental Services Pty Ltd (dated 13 Feb 2006) and provided in Appendix D of the Statement of Environmental Effects Modification to the Termination Building Forced Ventilation System Clyde Waste Transfer Station (Environ, Oct 2006) in relation to the dust suppression spray system at the terminal. The Dust Management Plan shall provide for the monitoring of the performance of the dust suppression system and for improving its performance as it may be necessary. Following the receipt of any dust related complaints, the Planning Secretary may require the Applicant to undertake further investigations, monitoring or implement measures aimed to mitigate identified dust impacts on residential areas associated with the operation of the terminal</p>	C	Dust Management Plan for Clyde Transfer Terminal (DMP)	The DMP was reviewed and addressed the requirements of the consent.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
50	<p>The Traffic Management Plan must address, but is not necessarily limited to, the following issues:</p> <p>(a) An education program for all drivers and owners of waste vehicles using the site, about the “left turn only” restrictions on entering and leaving the premises via Parramatta Road</p> <p>(b) A monitoring and recording program to identify and record any waste vehicle and its driver that breaches the “left turn only” restriction upon entering or leaving the premises via Parramatta Road.</p> <p>(c) An education program for all drivers and owners of waste vehicles using the site, about the waste transport routes permitted to be used in the vicinity of the development</p> <p>(d) A monitoring and recording program to identify and record any waste vehicle and its driver that breaches the permitted transport routes</p> <p>(e) An enforcement program including the imposition of identified punitive measures against any driver or vehicle owner whenever the above restrictions are breached</p> <p>(f) Contracts with waste transporters to include conditions addressing entry and exit restrictions and permissible waste transport routes and punitive measures for non-compliances.</p> <p>(g) Measures to minimise trucks and other heavy vehicles from entering or exiting the premises between the following hours: 10pm and 5am Mondays to Saturdays; 10pm and 7am Sundays and public holidays.</p>	NC	Traffic Management Plan for the Clyde Transfer Terminal (TMP)	<p>The TMP was reviewed and addressed the requirements, with the exception of:</p> <p>(e) An enforcement program including the imposition of identified punitive measures against any driver or vehicle owner whenever the above restrictions are breached</p> <p>(f) Contracts with waste transporters to include conditions addressing entry and exit restrictions and permissible waste transport routes and punitive measures for non-compliances.</p> <p>(g) Measures to minimise trucks and other heavy vehicles from entering or exiting the premises between the following hours: 10pm and 5am Mondays to Saturdays; 10pm and 7am Sundays and public holidays.</p> <p>The auditor understands punitive measures would be difficult for a commercial business to enforce. Veolia stated they prefer to re-train offending parties. Therefore it is recommended a modification to the consent to remove the requirement to enforce punitive damages.</p>	CTT-DA-NC-01
51	<p>The Vermin and Pest Control Plan must address, but is not necessarily limited to, the following issues:</p> <p>(a) Removing all waste from the tipping areas at the end of each day</p> <p>(b) Cleaning up all waste tipping and handling areas at the end of each day</p> <p>(c) Regular cleaning of catch drains and drainage sumps</p> <p>(d) Minimising onsite waste storage and handling</p> <p>(e) Maintaining any bird deterrent measures such as hanging wires</p> <p>(f) Routine inspection and action for potential vector habitats</p> <p>(g) Using commercial vector control specialists</p> <p>(h) Conducting routine litter patrols to collect trash on site, around the perimeter, on immediately adjacent properties and on approach roads.</p>	C	Vermin and Pest Control Plan for Clyde Transfer Terminal (VCPC)	The VCPC was reviewed and addressed the requirements of the consent.	
52	The Stormwater Management Plan must describe the post construction measures to be employed to operate and maintain the stormwater controls at the premises in a manner that minimises the pollution of waters.	C	Stormwater Management Plan for Clyde Transfer Terminal (SMP)	The SMP was reviewed and addressed the requirements of the consent.	
53	The Site Contamination Management Plan must include any actions recommended in the environmental report by the site auditor that apply to operation stage activities.	C	Site Contamination Management Plan for Clyde Transfer Terminal (SCMP)	The SCMP was reviewed and addressed the requirements of the consent.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
54	<p>The Noise Management Plan shall be drafted in consultation with the rail operator for operation of the rail siding adjacent to the waste packaging terminal for the rail haulage services for Collex. The plan is to be submitted to Auburn Council. The plan must address the objective of mitigating operational rail noise from operations directly attributable to the loading and unloading of containers and associated rail operation on the siding adjacent to the Collex terminal, relating to the movement of containers from the Collex packing terminal. The plan must also identify reasonable noise mitigation strategies:</p> <p>a) Upgrade to hardstand areas utilised for loading and unloading of trains and rail track upgrade where feasible; b) Resurfacing of hardstand area with appropriate noise mitigation materials; c) Track repair and realignment where feasible and appropriate to minimise forklift travel having regard for other rail operations and heritage issues; d) Container management protocols to minimise movement and handling of containers with an emphasis on noise mitigation; e) Identification and utilisation of forklifts to minimise noise impacts and implement measures to minimise use of reversing alarms at night; f) Establishment of a noise complaints procedure; g) Investigating the scheduling of trains outside critical hours subject to metropolitan curfew, Rail Infrastructure Corporation slot management and rail operational considerations; h) Ongoing community consultation; and i) Employee education in noise mitigation practices.</p>	C	<p>Noise Management Plan for Clyde Transfer Terminal - Rail Operations (NMP - Rail)</p> <p>&</p> <p>Noise Management Plan for Clyde Transfer Terminal - Terminal Operations (NMP - Terminal)</p>	The NMPs were reviewed and addressed the requirements of the consent.	
54A	<p>Prior to the commencement of expanded operations under DA No. 205-08-01 MOD 5, the Proponent must prepare an Operational Contingency Management Plan (OCMP) to the satisfaction of the Planning Secretary. The OCMP must form part of the EMP (Operation) required by condition 41. The OCMP must:</p> <p>(a) be prepared by a suitably qualified and experience person(s); (b) be prepared in consultation with the EPA; (c) detail the exception circumstances when the amount of waste in the terminal building would exceed 500 tonnes at any one time (d) describe the measures in place to minimise the number of instances of these exceedances; (e) identify all potential impacts arising from these instances; (f) characterise these impacts, such as effects, duration, receptors, level of impact; (g) detail appropriate mitigation measures;</p>	NT		Unable to audit the level of satisfaction of the Director - General	
54B	<p>The Proponent must</p> <p>(a) not commence expanded operations until the OCMP required by condition 54A is approved by the Planning Secretary; and (b) implement the most recent version of the OCMP approved by the Planning Secretary for the duration of the development.</p>	NT		Unable to audit the level of satisfaction of the Director - General	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
Environmental Management Representative (EMR)					
55	<p>The Applicant shall employ or contract a suitably qualified Environmental Management Representative (EMR) throughout the duration of the development. The EMR shall:</p> <p>(a) be the principle person responsible for overseeing environmental management of the development and supervision of environmental services</p> <p>(b) have the authority to stop work if an adverse impact on the environment has occurred or is likely to occur</p> <p>(c) be responsible for the certification of all environmental management plans and procedures</p> <p>(d) be responsible for considering and advising on matters specified in the Conditions of Consent and compliance with such matters</p> <p>(e) oversee the receipt of, and response to, complaints about the environmental performance of the development</p> <p>(f) be present on-site during any critical construction or operational activity as defined in the relevant Environmental Management Plan</p> <p>(g) be a member of the Community Consultative Committee for the development</p>	C	DG approval of EMR dated 21/12/18 & PD for the Operations Project Manager	<p>DG approval for the nominated EMR was provided in 2018.</p> <p>The Position Description for the Operations Project Manager (nominated as EMR) includes these responsibilities.</p>	
Environmental Monitoring Program					
56	<p>The Applicant shall prepare and implement a detailed Environmental Monitoring Program for the proposed development. The program shall include, but is not necessarily limited to, all the monitoring required by this Consent, the environment protection licence, the EMP (Construction Stage) and the EMP (Operation Stage) for the development. The program must:</p> <p>(a) Identify the environmental issues to be monitored</p> <p>(b) For each issue, indicate whether its monitoring is required by this Consent, the environment protection licence, the EMP (Construction Stage), the EMP (Operation Stage), or by another instrument</p> <p>(c) Set standards and performance measures for each issue</p> <p>(d) Describe in detail how each issue is to be monitored, who will conduct the monitoring, how often the monitoring will be conducted, and how the results of the monitoring will be recorded and reported to the Director-General and other relevant authorities</p> <p>(e) Indicate the actions taken and procedures to be followed if any non-compliance is detected.</p>	C	<p>Environmental Monitoring Program for Clyde Transfer Terminal (EMP)</p> <p>WIS-8466-CTT - Exceedances Notification Work Instruction</p>	The EMP was reviewed and it address the requirements of the condition.	
57	<p>All monitoring required by this Consent must be:</p> <p>(a) conducted by suitably qualified persons approved by the Director-General</p> <p>(b) conducted in accordance with established standards and protocols</p> <p>(c) reported annually in the Annual Environmental Management Report.</p>	C	Multiple odour monitoring reports and AEMRs	<p>All monitoring undertaken at the site is undertaken by personnel or contractors that are suitably qualified. The monitoring records for odour monitoring include detailed method statements that are consistent with Australian Standards (AS/NZS 4392.3:2001).</p> <p>Condition 57(a) also requires the persons undertaking the monitoring are approved by the Director-General. This written approval was unable to be supplied during the audit. It is likely the approval was sought in 2004 and may not have been filed electronically. However due to the monitoring reports being supplied to the department for many years and published online without issue, compliance is inferred.</p>	CTT-DA-OFI-01

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
58	The Applicant shall include a report on the Environmental Monitoring Program in the Annual Environmental Management Report. The report must: (a) summarise the results from the Environmental Monitoring Program over the previous year (b) analyse the results in relation to both past performance, and the relevant standards and performance measures of the development (c) identify any emerging trends in the data over the life of the development (d) include a copy of the detailed monitoring results as an attachment.	C	The AEMR for 2019 and 2020	The AEMRs reviewed address the requirement of the condition	
Annual Environmental Management Report					
59	Between twelve and fourteen months after the issue date of an environment protection licence for the development, and annually thereafter for the duration of the development, the Applicant shall submit an Annual Environmental Management Report to the Director-General, the EPA and the Community Consultative Committee. The report shall be made available to the public on request to the Applicant. The report may be combined with the Annual Return required by the environment protection licence to be submitted to the EPA. The report must: (a) identify all the standards, performance measures, and statutory requirements the development is required to comply with (b) review the environmental performance of the development to determine whether it is complying with the standards, performance measures, and statutory requirements (c) identify each occasion during the previous year when the standards, performance measures, or statutory requirements have not been complied with (d) where any non-compliance is identified, describe the actions or measures taken to ensure compliance, who is responsible for carrying out the actions, and when the actions were (or will be) implemented (e) include a summary of any complaints made about the development, and indicate the actions taken to address the complaints (f) include a report on the Environmental Monitoring Program as specified in this Consent.	C	The AEMR for 2019 and 2020	The AEMRs reviewed address the requirement of the condition.	
Independent Environmental Audits					
60	Every year following the date of this consent, or at periods otherwise agreed to by the Director-General, and until such time as agreed to by the Director-General, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall: (a) Be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Monitoring and any specifications of the Director-General; (b) Be conducted by a suitably qualified independent person approved by the Director-General; (c) Assess compliance with the requirements of this consent; (d) Assess the implementation of the EMP (Construction) and EMP (Operation) and review the effectiveness of the environmental management of the development; and (e) Be carried out at the Applicants' expense.	C	2019 Independent Environmental Audit Veolia Environmental Services Australia Clyde Transfer Terminal	Annual audits were observed for 2018 and 2019.	
Monitoring and audit results to be publicly available					
61	The results of all monitoring and auditing required by this Consent must be made publicly available at the same time they are submitted to the Director-General	C	https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station	Monitoring records were available online at the time of audit.	
WASTE MANAGEMENT					

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
	Waste Receipt and Removal				
62	The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises unless permitted to do so by an environment protection licence.	C	Audit of the EPL	No evidence of non-compliance with this condition was observed.	
63	The Applicant must ensure that waste received at the premises is restricted to inert and solid waste as defined in Schedule 1, Part 3 of the Protection of the Environment Operations Act 1997 or is assessed as inert waste or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (EPA, 1999).	C	Site Inspection	All the waste is brought under a contract. The weighbridge checks the waste type from the contractor. At the tipping floor terminal personnel check waste is conformant. The site inspection demonstrated there were sufficient facilities available at the site to remove and dispose of non-conforming waste.	
64	No waste shall be removed from the premises except: (a) construction waste arising from activities during the construction stage of the development (b) waste in sealed shipping containers to be transported by rail for disposal at the Woodlawn Bioreactor (c) small quantities of waste not permitted by the EPL to be received at the terminal, that have been separated out from the incoming waste stream through a documented operational procedure of regular waste inspections and associated control measures: these wastes are to be disposed of to a lawful waste facility (d) waste generated from onsite activities such as plant maintenance and repairs, that is not suitable for acceptance at the Woodlawn Bioreactor: these wastes are to be disposed of to a lawful waste facility (e) wastewater generated onsite: these wastes are to be disposed of to sewer (f) leachate generated from the onsite management of waste: these wastes are to be disposed of to sewer or a lawful liquid waste treatment plant (g) recyclable materials generated from the onsite office: these wastes are to be directed to a suitable recycling facility.	C	Site inspection & Waste Records	No evidence of non-compliance with this condition was observed from the records reviewed.	
65	The Applicant shall implement the approved Waste Management Plan to the satisfaction of the Director-General.	NT		Unable to audit the level of satisfaction of the Director - General.	
	Asbestos Waste				
66	The Applicant will not accept asbestos at the premises. The Waste Management Plan must make provision for identification of asbestos in waste not knowingly received at the premises and for the proper and safe disposal of any asbestos so identified.	C	Site inspection, training records (asbestos training)	Training records were observed that demonstrated the site manager and leading hands were trained in asbestos identification. Posters noted during the site inspection showed there was communication to personnel to assist with the identification of asbestos.	
	Waste Management and Record Keeping				

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
67	Records shall be made and maintained of each load of waste entering the premises, including the identification of the vehicle, weight, nature and origin of the waste received, and whether the waste was received in pre-packaged shipping containers or for on-site containerisation.	C	Site inspection	The waste records observed during the site inspection addressed the condition of consent.	
68	Records shall be made and maintained of any waste leaving the premises by motor vehicle, including the identification of the vehicle, and the weight, classification and destination of the waste.	C	Waste Records observed during the site inspection	The waste records observed during the site inspection addressed the condition of consent.	
69	Records shall be made and maintained of all events involving the removal of any waste received at the premises which is not permitted to be accepted at the premises.	C	Waste Records observed during the site inspection	Records of non-compliant waste received at CTT and transported off-site were observed. This included gas bottles and steel waste.	
ODOUR MANAGEMENT					
70	<p>The Applicant shall install a forced ventilation system in the Terminal Building in accordance with MOD-133-11-2006, the design specified in the report Addendum to Final Report – Odour Mitigation Study – Clyde Waste Transfer Terminal – Collex Pty Ltd prepared by the Odour Unit Ltd and dated July 2006, and drawing N3630/100 tilted Clyde Transfer Terminal Roof and Gallery Level Proposed Ducting Layout Details prepared by Turnkey Environmental Systems Pty Ltd. The system shall include a single air exhaust stack to discharge all air from the waste receipt and compaction/loading building, in accordance with the following specifications;</p> <p>Minimum Stack Height (meters above existing ground level) Minimum Stack Height above the top of the roof (meters) Minimum Stack Diameter (meters) Minimum Stack Exit Velocity (m/s) Minimum Stack Exit Volumetric Flowrate (m³/s) Location (X coordinate) Location (Y coordinate) 21 4 2.64 20 109.48 317145 6254129</p> <p>The six original fans drawing air from the building through the odour control system shall be replaced with six fans of at least 18kW capacity (each) as per MOD-133-11-2006. The forced air extraction system installed under MOD-133-11-2006 shall be capable of operating in a proper and efficient manner under continuous duty</p> <p>Any variations of the design and specifications indicated above resulting from the detailed design of the odour control system shall be approved by the Planning Secretary, in consultation with the EPA, prior to the commencement of construction. As part of such approval, the Planning Secretary may require the Applicant to provide information demonstrating that the final design will not result in increased impacts as those predicted in the documents referred to under condition 1(e)</p>	NT		Unable to audit the level of satisfaction of the Director - General	
71	Construction of the Terminal Building forced ventilation system in accordance with MOD-133-11-2006 shall be undertaken under continuous operation of the original forced ventilation system (as per design approved by the Planning Secretary in correspondence to Collex dated 5 January 2003). Forced ventilation in the Terminal Building, by the operation of the original system or the new system subject to MOD-133-11-2006, shall not be interrupted at any time during the period of transferring odour control systems, unless otherwise approved by the Planning Secretary following a written application for temporary stoppage of the ventilation system during that period. Such application shall provide details of stoppage time required, impacts predicted, and proposed mitigation measures and notification requirements. This condition does not apply at times when waste is not contained within the building.	NT		Not relevant to the current audit period	
72	Prior to commencement of construction of the works required under MOD-133-11-2006, the Applicant shall notify the Planning Secretary, Auburn Council, the EPA and the Community Consultative Committee in writing of the date of commencement of construction, details of the main construction activities and anticipated duration of construction and times of the main construction activities.	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
73	The Applicant shall implement the approved Odour Management Plan to the satisfaction of the Director-General.	NT		Not relevant to the current audit period	
74	The Applicant must not cause or permit the emission of offensive odours from the premises, as defined under section 129 of the Protection of the Environment Operations Act 1997.	C	Site inspection	No noticeable odour was noted outside of the terminal building at the time of the site inspection. The weekly inspection included an item for checking noticeable odour. No odour complaints have been received for the CTT during the audit period.	
75	The Applicant shall continuously operate the forced ventilation system subject to MOD-133-11-2006 (and the original forced ventilation system until the system subject to MOD-133-11-2006 becomes operational) whenever waste is contained within the building, unless otherwise approved by the Planning Secretary. As part of such approval, the Planning Secretary may require the Applicant to carry out additional investigations and implement additional measures to mitigation any off-site impacts that may be anticipated or identified from such investigations	C	Site inspection	Maintenance records of the forced ventilation system were observed and demonstrated the system is functioning. During the site inspection it appeared the forced ventilation system was operational.	
76	Within three months of the commissioning of the forced ventilation system subject to MOD-133-11-2006, the Applicant shall conduct; (a) odour emission rate sampling and analysis from the single stack (conducted in accordance with Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA, January 2007); and (b) odour dispersion modelling for the stack odour discharge conducted in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, August 2005) and the Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (EPA, November 2006).	NT		Not relevant to the current audit period	
77	The results of any odour performance testing and modelling conducted in accordance with the conditions of this consent, including those required under condition 77, shall be submitted to the Community Consultative Committee, the EPA, the Planning Secretary and shall be made publicly available, within eight weeks of the testing and modelling having been completed.	NT		Not relevant to the current audit period	
78	Following the review of the investigations required under condition 77, or any other odour related investigations and documentation required under this consent, the Planning Secretary in consultation with the EPA may require the Applicant to carry out additional investigations and implement additional measures to mitigate any identified off-site odour impacts.	NT		Not relevant to the current audit period	
79	The results of any odour performance testing conducted in accordance with the conditions of this Consent may be submitted to the Director-General together with a proposal to vary the continuous operation of the forced air extraction and odour filtration system. The proposal must be prepared in consultation with the Community Consultative Committee and the EPA. Any variation to the continuous operation of the forced air extraction and odour filtration system must not be carried out except with the written approval of the Director-General.	NT		Not relevant to the current audit period	
80	All odour monitoring and management plans shall be made available to the public on request to the Applicant.	C	https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station	All odour monitoring records were observed to be published online.	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
81	Any containerised waste shall not be exposed to the atmosphere at the site, except via a pressure release mechanism and odour filtration system on a container maintained and operated in accordance with the Conditions of this Consent.	C	Site inspection	All waste containers observed during the site inspection were sealed and the pressure release was observed to be directed via a filtration system	
82	The design of the pressure release mechanism and odour filtration system on the waste containers shall be approved by the Director-General prior to the acceptance of any uncontainerised waste at the premises.	NT		Not relevant to the current audit period	
83	Any waste that has been packed into containers on the site, shall not be re-exposed to the atmosphere at the site, except via a pressure release mechanism and odour filtration system on a container maintained and operated in accordance with the Conditions of this Consent.	C	Site inspection	All waste containers observed during the site inspection were sealed and the pressure release was observed to be directed via a filtration system	
84	Deleted Condition (MOD-133-11-2006)	NT		Condition has been removed	
85	Deleted Condition (MOD-133-11-2006)	NT		Condition has been removed	
86	Deleted Condition (MOD-133-11-2006)	NT		Condition has been removed	
87	The Applicant shall carry out monitoring the forced ventilation system subject to MOD-133-11-2006 (including air emissions monitoring or other) as may be required under any Environment Protection License. The monitoring results shall be reported in the Annual Environmental Management report required under condition 59.	C	Clyde Waste Transfer Terminal Odour Audit XXXIII - XXXV Annual Environmental Management Report - Clyde Transfer Terminal 2019	AEMRs for the audit period were reviewed and demonstrated monitoring was undertaken in accordance with the EPL. It should be noted the EPL does not specify monitoring of the forced ventilation system. ☐	CTT-DA-OFI-02
88	Monitoring for the concentration of a pollutant emitted to the air must be done in accordance with: (a) any methodology which is required by or under the Protection of the Environment Operations Act 1997 to be used for the testing of the concentration of the pollutant; or (b) if no such requirement is imposed by or under the Protection of the Environment Operations Act 1997, any methodology which the general terms of approval or a condition of the licence (as the case may be) requires to be used for that testing; or (c) if no such requirement is imposed by or under the Protection of the Environment Operations Act 1997 or by the general terms of approval or a condition of the licence (as the case may be), any methodology approved in writing by the EPA for the purposes of that testing prior to the testing taking place.	C	Clyde Waste Transfer Terminal Odour Audit XXXIII - XXXV Annual Environmental Management Report - Clyde Transfer Terminal 2020	With reference to condition 88(a), the PEO Act refers to the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> , which does not prescribe a specific method for ambient odour monitoring. With reference to condition 88 (b), no specific method for ambient odour monitoring is prescribed in the consent conditions or EPL. In the most recent AEMR, Veolia states the standards used for ambient odour emissions are: <i>German Standard VDI 3940 "Determination of Odorants in Ambient Air by Field Inspections"</i> . Discussions with the odour monitoring consultant (The Odour Unit) have confirmed the methods adopted for ambient odour monitoring are consistent with the methods EPA utilises for its monitoring. The ambient odour monitoring is undertaken in accordance with condition 48 (f). ☐	
89	Deleted Condition (MOD-133-11-2006)	NT		Condition has been removed	
90	Prior to the installation of the forced ventilation system subject to MOD-133-11-2006, the Applicant shall provide to the EPA, manufacturer's performance guarantees, demonstrating to the satisfaction of the EPA that the equipment will comply with the design parameters specified in this consent and/or the Environmental Protection License.	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification																																																												
91	<p>A meteorological station must be sited and operated at the premises in accordance with the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW. The Applicant shall undertake the sampling and analysis of the meteorological parameters specified in table below. Sampling and analysis of meteorological parameters shall be carried out strictly in accordance with the methods and references specified in the table.</p> <table><tr><th>Parameter</th><th>Units of measure</th><th>Averaging Period</th><th>Method¹</th><th>Frequency</th></tr><tr><td>Wind Speed @ 10 m</td><td>m/s</td><td>1 hour</td><td>AM-2 & AM-4</td><td>Continuous</td></tr><tr><td>Wind Direction @ 10 m</td><td>°</td><td>1 hour</td><td>AM-2 & AM-4</td><td>Continuous</td></tr><tr><td>Sigma Theta @ 10 m</td><td>°</td><td>1 hour</td><td>AM-2 & AM-4</td><td>Continuous</td></tr><tr><td>Temperature @ 10 m</td><td>K</td><td>1 hour</td><td>AM-4</td><td>Continuous</td></tr><tr><td>Temperature @ 2 m</td><td>K</td><td>1 hour</td><td>AM-4</td><td>Continuous</td></tr><tr><td>Solar Radiation</td><td>W/m²</td><td>1 hour</td><td>AM-4</td><td>Continuous</td></tr><tr><td>Rainfall</td><td>mm</td><td>24 hours</td><td>AM-4</td><td>Continuous</td></tr><tr><td>Evaporation</td><td>mm</td><td>24 hours</td><td>Note²</td><td>Continuous</td></tr><tr><td colspan="2">Additional Requirements</td><td colspan="3">Method¹</td></tr><tr><td colspan="2">Siting</td><td colspan="3">AM-1 & AM-4</td></tr><tr><td colspan="2">Measurement</td><td colspan="3">AM-2 & AM-4</td></tr></table> <p>Note: ¹ All methods are specified in the Approved Methods for the Sampling and Analysis of Air Pollutants in NSW. Note: ² Method approved by the EPA in writing.</p>	Parameter	Units of measure	Averaging Period	Method ¹	Frequency	Wind Speed @ 10 m	m/s	1 hour	AM-2 & AM-4	Continuous	Wind Direction @ 10 m	°	1 hour	AM-2 & AM-4	Continuous	Sigma Theta @ 10 m	°	1 hour	AM-2 & AM-4	Continuous	Temperature @ 10 m	K	1 hour	AM-4	Continuous	Temperature @ 2 m	K	1 hour	AM-4	Continuous	Solar Radiation	W/m ²	1 hour	AM-4	Continuous	Rainfall	mm	24 hours	AM-4	Continuous	Evaporation	mm	24 hours	Note ²	Continuous	Additional Requirements		Method ¹			Siting		AM-1 & AM-4			Measurement		AM-2 & AM-4			C	Meteorological station	Observed the meteorological station and the data required was included in the monitoring report.	
Parameter	Units of measure	Averaging Period	Method ¹	Frequency																																																													
Wind Speed @ 10 m	m/s	1 hour	AM-2 & AM-4	Continuous																																																													
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Measurement		AM-2 & AM-4																																																															
DUST MANAGEMENT																																																																	
92	The Applicant shall implement the Dust Management Plan (Construction Stage) and the approved Dust Management Plan (Operation Stage) to the satisfaction of the Director-General.	C	Site Inspection	No evidence of non-conformance with the dust management plan was observed during the audit.																																																													
93	All operations and activities occurring at the premises must be carried out in a manner that will minimise the emission of dust from the premises.	C	Site inspection	No evidence of dust generating activities occurring at CTT were observed during the site inspection.																																																													
94	All trafficable areas and vehicle manoeuvring areas in or on the premises shall be maintained at all times in a condition that will minimise the generation or emission from the premises, of wind-blown or traffic generated dust.	C	Site inspection	The site was in a clean condition during the site inspection. Weekly and monthly inspection records included the inspection of litter. A street sweeper was available at the time of audit for daily sweeps of the site.																																																													
95	Trucks entering and leaving the premises that are carrying loads must be covered at all times, except during loading and unloading. (EPA)	C	Site inspection	No trucks were observed entering or exiting the site with the tailgate open. It was also observed the truck driver induction includes a requirement to keep the tail gate closed when entering or leaving the site.																																																													
96	The Applicant must prepare and implement an Ambient Air Quality Monitoring Plan. The Plan must address, but not necessarily be limited to, the following: (a) Monitoring methodologies and standards (sampling and analysis); (b) Monitoring for concentrations of total suspended particulates (TSP) and dust deposition rates; (c) Locations where monitoring will be carried out; (d) Detailed monitoring cycle and the duration of each monitoring cycle; and (e) Reporting.	C	Environmental Monitoring Program for Clyde Transfer Terminal Odour Management Plan for Clyde Transfer Terminal Dust Management Plan for Clyde Transfer Terminal	The monitoring programs that address this condition are described within: - Odour Management Plan - Dust Management Plan - Environmental Monitoring program																																																													
97	Deleted Condition (DA-205-08-01-MOD-3)	NT		Condition has been removed																																																													
AIR MONITORING																																																																	
98	Detailed records of operating conditions inside the waste terminal building shall be made coincident with any monitoring for odour or dust required by Conditions of this Consent.	C	Waste Records	Records for waste at the facility at any one time were available during the audit.																																																													

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification								
	WATER MANAGEMENT												
99	Except as may be expressly provided by a licence under the Protection of the Environment Operations Act 1997 in relation of the development, section 120 of the Protection of the Environment Operations Act 1997 must be complied with and in connection with the carrying out of the development.	C	Site Inspection & Stormwater Management Plan for Clyde Transfer Terminal	No evidence of potential stormwater contamination was observed during the site inspection. The documented stormwater management plan was reflected and adequately implemented during the audit.									
100	Any water that comes into contact with waste at the premises must be directed to the leachate collection system.	C	Site Inspection & Stormwater Management Plan for Clyde Transfer Terminal	All leachate waste observed to be directed to a leachate collection system which was taken off-site as liquid waste.									
101	The approved Soil and Water Management Plan must be implemented prior to and for the duration of the construction stage of the development.	NT		Not relevant to the current audit period									
102	Stormwater pollution controls must be implemented prior to and for the duration of the operation of the development. The controls shall be consistent with the Stormwater Management Plan for the catchment. Where a Stormwater Management Plan has not yet been prepared the Scheme shall be consistent with the guidance contained in Managing Urban Stormwater: Council Handbook (available from the EPA). The controls shall incorporate minimum levels of treatment in the following table: <table><tr><th>Development component</th><th>Minimum level of stormwater treatment</th></tr><tr><td>Undeveloped sections of access road</td><td>Existing overland flow to Duck River</td></tr><tr><td>Roof water</td><td>On-site detention</td></tr><tr><td>Gatehouse and weighbridge area, carpark, access road and container loading area adjacent to the compaction units</td><td>First flush system, GPT, oil and grease separation, on-site detention</td></tr></table>	Development component	Minimum level of stormwater treatment	Undeveloped sections of access road	Existing overland flow to Duck River	Roof water	On-site detention	Gatehouse and weighbridge area, carpark, access road and container loading area adjacent to the compaction units	First flush system, GPT, oil and grease separation, on-site detention	C	Site Inspection & Stormwater Management Plan for Clyde Transfer Terminal	The stormwater management plan reviewed during the audit addressed this condition. The site inspection observed the minimum level of stormwater treatment. '	
Development component	Minimum level of stormwater treatment												
Undeveloped sections of access road	Existing overland flow to Duck River												
Roof water	On-site detention												
Gatehouse and weighbridge area, carpark, access road and container loading area adjacent to the compaction units	First flush system, GPT, oil and grease separation, on-site detention												
	SITE CONTAMINATION												
103	The Site Contamination Management Plan must be implemented to the satisfaction of the Director-General, prior to and for the duration of the development	C	Site Contamination Management Plan for Clyde Transfer Terminal	No evidence of non-conformance with the Site Contamination Management Plan was observed during the audit.									
	NOISE MANAGEMENT												
104	The Applicant shall implement the approved Construction Noise Management Plan, to the satisfaction of the Director-General.	NT		Not relevant to the current audit period									
105	The Applicant shall implement the Noise Management Plan, to the satisfaction of the Director-General.	C	Noise Management Plan for Clyde Transfer Terminal	No evidence of non-conformance with the Noise Management Plan was observed during the audit.									
106	All construction work at the premises that creates audible noise at residential premises must only be conducted between 7:00am and 5:00pm on Mondays to Fridays and between the hours of 8:00am and 5:00pm on Saturdays. There shall be no construction activities on Sundays or public holidays. The allowable construction times may be varied by an environment protection licence.	NT		Not relevant to the current audit period									
107	The delivery of construction material outside the hours of construction permitted by this Consent is not permitted except when required by police or other authorities for safety reasons; and/or because the operation, personnel or equipment are endangered. In such circumstances, notification is to be provided to the EPA and affected residents at least 24 hours prior to the delivery, or within a reasonable period in the case of an emergency.	NT		Not relevant to the current audit period									
108	Deleted Condition (DA-205-08-01-MOD-3)	NT		Condition has been removed									
109	Deleted Condition (DA-205-08-01-MOD-3)	NT		Condition has been removed									

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
110	Deleted Condition (DA-205-08-01-MOD-3)	NT		Condition has been removed	
111	Deleted Condition (DA-205-08-01-MOD-3)	NT		Condition has been removed	
112	The Applicant shall implement a Heavy Vehicle Noise Monitoring Management Program for the development to the satisfaction of the Planning Secretary. This program must; (a) monitor heavy vehicle noise on site, in accordance with the methods outlined in the "Truck Noise Monitoring – Proposed Test and Management Plan" prepared by Heggies and dated 26 May 2008; (b) be undertaken quarterly for a year starting in October 2008, and annually thereafter, unless otherwise agreed by the Planning Secretary (c) measure at least 25% of the heavy vehicles visiting the site; (d) identify heavy vehicles exceeding the relevant noise criteria specified in Australian Design Rule 28/01, or its successor, and ensure that the owners of these subsequently comply with the relevant noise criteria (e) report the number of non-compliant heavy vehicles identified and the actions undertaken to address these non-compliances in the Annual Environmental Monitoring Report; and (f) be amended, should the monitoring activities not achieve the aim of the program to the satisfaction of the Planning Secretary	C	Noise Management Plan for Clyde Transfer Terminal - Terminal Operations Annual Truck Noise Measurements Clyde Transfer Terminal 2019 & 2020	The Noise Management Plan for the site includes an annual noise monitoring program and noise limits for heavy vehicles. The Annual Truck Noise Measurements Clyde Transfer Terminal was reviewed and addressed the requirements of this condition.	
113	The Applicant shall implement an induction program for all drivers of trucks that deliver waste to the waste terminal with the objective of mitigating noise impacts of trucks entering and leaving the waste terminal, including driving procedures and throttle management. The program is to be designed in consultation with Auburn Council and is to emphasise the importance of noise emission control, driving and operating practices and procedures for night time activities.	C	Clyde Transfer Terminal - Driver Induction	An induction program for drivers was observed during the audit. It was advised during the audit this is delivered to the customer via the Site Manager attending the site and delivering a train the trainers presentation. This process has a reliance on the customers being proactive in delivering the training. Records of drivers having completed the training are provided to Veolia for filing. No verification of customers drivers being completed (e.g. spot audit or annual review) was observed during the audit.	CTT-DA-OFI-03
114	The Applicant shall, in conjunction with the rail operator, implement an induction program for all train drivers and other rail staff dedicated to transporting containers to and from the Collex terminal area by train to Woodlawn. The program is to emphasise noise mitigation measures through "Good Neighbour" rail techniques such as notch control, idling practices, shunting speeds and engine control and shall form an integral part of the operational noise management plan.	C	None	Whilst the auditor was advised training has been supplied to the rail operator, no training records were available at the time of audit. It is understood Pacific National has internal training processes for "Good Neighbour" rail techniques that may be sufficient to address this condition however it was beyond the scope of this audit to verify this.	CTT-DA-OFI-04
VERMIN AND PEST MANAGEMENT					

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
115	The design of the terminal building and associated waste handling facilities shall incorporate such reasonable measures to eliminate or minimise the potential for birds, rodents, flies and other pests to congregate at the development. Consideration shall be given to incorporating the following measures: (a) sealing surfaces to prevent moisture and odour absorption (b) elimination of crevices where waste, moisture and vermin can accumulate (c) providing screening of the ventilation openings in the building (d) eliminating horizontal surfaces where birds can congregate (e) minimising horizontal ledges where dust and litter can accumulate (f) using fencing and netting to prevent wind-blown litter from escaping.	NT		Not relevant to the current audit period	
116	The Vermin and Pest Management Plan must be implemented for the duration of the operation of the development, to the satisfaction of the Director-General.	C	Site inspection and Vermin and Pest Control Plan for Clyde Transfer Terminal	The Vermin and Pest Control Plan was adequately implemented during the audit.	
117	The Applicant must take all practicable measures to prevent the attraction and infestation of the premises with vermin and pests.	C	Site Inspection	All reasonable and practical measures for preventing the attraction of vermin and pests was observed during the audit.	
TRAFFIC MANAGEMENT					
118	All access to the development shall be via a sealed access road from Parramatta Road. No vehicle shall enter or exit the development via the internal road connecting the Clyde Marshalling Yards to Rawson Street	C	Site Inspection	During the site inspection it was observed all vehicles were entering and exiting via the sealed access road from Parramatta Road. This requirement was also reflected in the site induction and traffic management plan.	
119	No vehicle is permitted to turn right into the site off Parramatta Road until the intersection upgrade works have been completed to the satisfaction of Cumberland Council and Roads and Maritime Services (RMS).	C	Site Inspection	During the site inspection no vehicles were observed to be turning right into the site off Parramatta Road. This requirement was also reflected in the site induction and traffic management plan.	
119A	Prior to the commencement of construction of the intersection upgrade works, the design of the intersection must be prepared in consultation with and to the satisfaction of Cumberland Council and RMS. The intersection design must accommodate the largest vehicle associated with the development as follows: (a) turning right into the development from Parramatta Road (e.g. 12.5 metre rigid waste trucks); (b) turning left into the development from Parramatta Road (e.g. semi trailers); and (c) turning left out of the development onto Parramatta Road (e.g. semi trailers).	NT		Not relevant to the current audit period	
119B	All intersection works must be to the full cost of the Proponent and at no cost to RMS or Cumberland Council	NT		Not relevant to the current audit period	
119C	The intersection upgrade works along Parramatta Road/private access road must be designed to meet RMS requirements, and endorsed by a suitable qualified practitioner. The design requirements must be in accordance with AUSTROADS and other Australian Codes of Practice. The certified copies of the civil design plans must be submitted to RMS for consideration and approval prior to the release of the Construction Certificate by the Principle Certifying Authority and commencement of road works	NT		Not relevant to the current audit period	
119D	The Proponent is required to enter into a Work Authorisation Deed (WAD) for the intersection works.	NT		Not relevant to the current audit period	
119E	Within 6 months of commencement of right-turn movements into the site, a road safety audit (RSA) must be undertaken for the intersection of Parramatta Road and the private access road by a suitably qualified, independent professional. The results of the RSA, including a program for the implementation of any audit recommendations, must be submitted to Cumberland Council and RMS for consideration and review within 60 days of completion of the audit.	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
120	No vehicle exiting the development shall turn right onto Parramatta Road.	C	Site Inspection	During the site inspection no vehicles were observed to be turning right from the site off Parramatta Road. This requirement was also reflected in the site induction and traffic management plan.	
121	The Traffic Management Plan must be implemented for the duration of the operation of the development, to the satisfaction of the Director-General.	C	Site Inspection	The Traffic Management Plan was adequately implemented at the time of audit.	
122	Prior to the commencement of construction activities, the Applicant shall demonstrate to the satisfaction of the Director-General, it has reasonable arrangements in place in respect of its use of the right of carriageway, concerning traffic sharing, protection of underground and above-ground services in the vicinity of the carriageway and the potential impacts on the existing weighbridge.	NT		Not relevant to the current audit period	
123	Deleted Condition (DA-205-08-01-MOD-5)	NT		Not relevant to the current audit period	
124	The Applicant shall fund a traffic study, to be conducted by an independent, suitably qualified person. The study is to be completed and submitted to the Director-General within 14 months from commencement of operations, review the operation of the access road in the first 12 months of the development and recommend any future actions to ensure sufficient future capacity of the access road. The Applicant shall provide a reasonable financial contribution towards any upgrade of the access road recommended by the study.	NT		Not relevant to the current audit period	
EMERGENCY MANAGEMENT					
Emergency Management Plan					
125	In relation to activities, which in the event of a disruption to operations may result in significant pollution being emitted, the Applicant must: (a) conduct an assessment to determine the potential internal and external causes of disruption of operations at the premises; (b) determine how these disruptions would impact on operations; and (c) identify the pollution that would result due to the disruption of operations and what impact the pollution would have on the health of the community and the environment.	C	Emergency Response Plan - Clyde Transfer Terminal	Emergency Response Plan includes an identification of the events that could result in a significant pollution event.	
126	In relation to matters identified in the previous condition, the Applicant must prepare an Emergency Management Plan. The Plan shall address, but not necessarily be limited to: (a) identification of threats to the environment and/or public health that could arise in relation to the construction and operation of development. These threats may include fire, overflow, power or other utility failure, natural disaster etc; (b) identification of strategies to minimise and ameliorate the effects of any water pollution identified from the groundwater and surface water monitoring programs; (c) an estimate of the cost of implementation; (d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised; (e) a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution; and (f) ensuring that all relevant employees are familiar with the emergency management plan.	NC	Emergency Response Plan - Clyde Transfer Terminal	The Emergency Response Plan was reviewed as part of the audit and the document addresses the requirements of the condition with the exception of: (c) an estimate of the cost of implementation	CTT-DA-NC-02
127	The Applicant shall consult with the NSW Fire Brigades and install a fire main and hydrants as required by the Fire Brigades. The system shall comply with AS 2419.	NT		Not relevant to the current audit period	

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
	LANDSCAPING				
128	The Applicant shall implement the Landscaping Plan in consultation with Auburn Council and to the satisfaction of the Director-General.	C	Site inspection	The landscaping plan was adequately implemented at the time of audit and site inspection.	
	DEVELOPMENT SETBACK				
129	The Applicant shall not construct any new buildings, hardstand, storage areas or vehicle manoeuvring areas within 30 metres of the Duck River Mean High Water Mark (as measured horizontally), to allow for the establishment of a viable riparian zone and multi-purpose recreation path.	NT		Not relevant to the current audit period	
	RIPARIAN RESTORATION				
130	The Applicant shall prepare at its own expense a site specific Riparian Zone Management Plan to address the issues contained in Auburn's draft Duck River Riparian Management Plan. The Plan shall be submitted to Auburn Council's Director Service Planning prior to the issue of the Occupation Certificate, or as otherwise agreed to by Auburn Council. Any riparian restoration activities undertaken by the Applicant shall, where appropriate, be consistent with but not necessarily limited to the activities listed in Attachment 3.	C	Audit Interview	It is understood the previous Council was not interested in collaborating with Veolia to address this condition. There is a new amalgamated Council that has commenced operations since the previous engagement.	CTT-DA-OFI-05
	DUCK RIVER ACCESSWAY				
131	The Applicant shall facilitate as appropriate and as required by the Director-General, the provision of a 3.0 metre wide reinforced concrete multi-purpose recreation path along the landward side of a 30 metre riparian/public open space dedication zone between the proposed development and Duck River, extending from Parramatta Road to the base of the Clyde railway bridge, along the edge of the development.	C	Audit Interview	It is understood the previous Council was not interested in collaborating with Veolia to address this condition. There is a new amalgamated Council that has commenced operations since the previous engagement.	CTT-DA-OFI-05
	LAND DEDICATION				
132	The Applicant shall facilitate as appropriate and as required by the Director-General and/or contribute to the dedication to Auburn Council of land incorporating the riparian restoration zone and multi-purpose recreation path between the proposed development and Duck River, extending from Parramatta Road to the base of the Clyde railway bridge, along the edge of the development.	C	Audit Interview	It is understood the previous Council was not interested in collaborating with Veolia to address this condition. There is a new amalgamated Council that has commenced operations since the previous engagement.	CTT-DA-OFI-05
	HERITAGE				
133	The Applicant shall contribute to the development and installation of heritage interpretation signage in consultation with Auburn Council, regarding the heritage significance of the Clyde Marshalling Yards and in particular Track 22 and associated pre-use of the area occupied by the development. The heritage signage is to be approved by Auburn Council and installed within 6 months of commencement of the approved use or as otherwise agreed to by Auburn Council.	NT		Not relevant to the current audit period	
	COMMUNITY LIASON				
	Community Consultative Committee				

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
134	The Proponent must make all reasonable attempts to establish and maintain a Community Consultative Committee generally in accordance with the Community Consultative Committee Guidelines for State Significant Projects, unless otherwise agreed to in writing by the Planning Secretary. The Proponent must submit a report to the Department every 12 months documenting its progress in establishing and maintaining the Community Consultative Committee over time.	C	https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station	Since receipt of the conditions of consent Veolia has attempted to establish a Community Consultative Committee with little success. Therefore alternative measures have been proposed and approved by the DPIE, including: <ul style="list-style-type: none"> ● Publishing the community information phone line and email address on the Veolia's Corporate Website on the Clyde Transfer Terminal webpage. ● Inviting community members to an Open Day at Clyde Transfer Terminal. ● Creation of an email distribution list to engage with interested stakeholders on a routine basis communicating updates on activities on site. ● Sending Clyde Transfer Terminal's Annual Environmental Monitoring Reports (AEMR) to Cumberland Council. 	
135	The Applicant shall, at its own expense: (a) provide appropriate facilities for meetings of the Committee; (b) nominate a representative to attend all meetings of the Committee; (c) provide to the Committee regular information on the progress of the work and monitoring results; (d) promptly provide to the Committee such other information as the Chairperson of the Committee may reasonably request concerning the environmental performance of the development; and (e) provide reasonable access for site inspections by the Committee.	C	https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station	As above	
136	The Applicant shall establish a trust fund to be managed by the Chairperson of the Committee to facilitate functioning of the Committee, and pay \$2000 per annum to the fund for the duration of the development. The payment shall be indexed according to the Consumer Price Index (CPI) at the time of payment. The first payment shall be made by the date of the first Committee meeting. The Applicant shall also contribute reasonable funds for payment of the independent Chairperson, to the satisfaction of the Director-General.	NC	Audit Interview	The condition requires Veolia to establish and maintain a trust fund to facilitate the functioning of the Community Consultative Committee. During the audit it was determined Veolia had not established such a fund. Whilst it is understood a community consultative committee has not been able to be established, the requirement for payment to a trust fund as required by this condition has not been removed. Therefore Veolia has not demonstrated reasonable compliance with this condition.	CTT-DA-NC-03
COMMUNITY ENHANCEMENT PROGRAM					

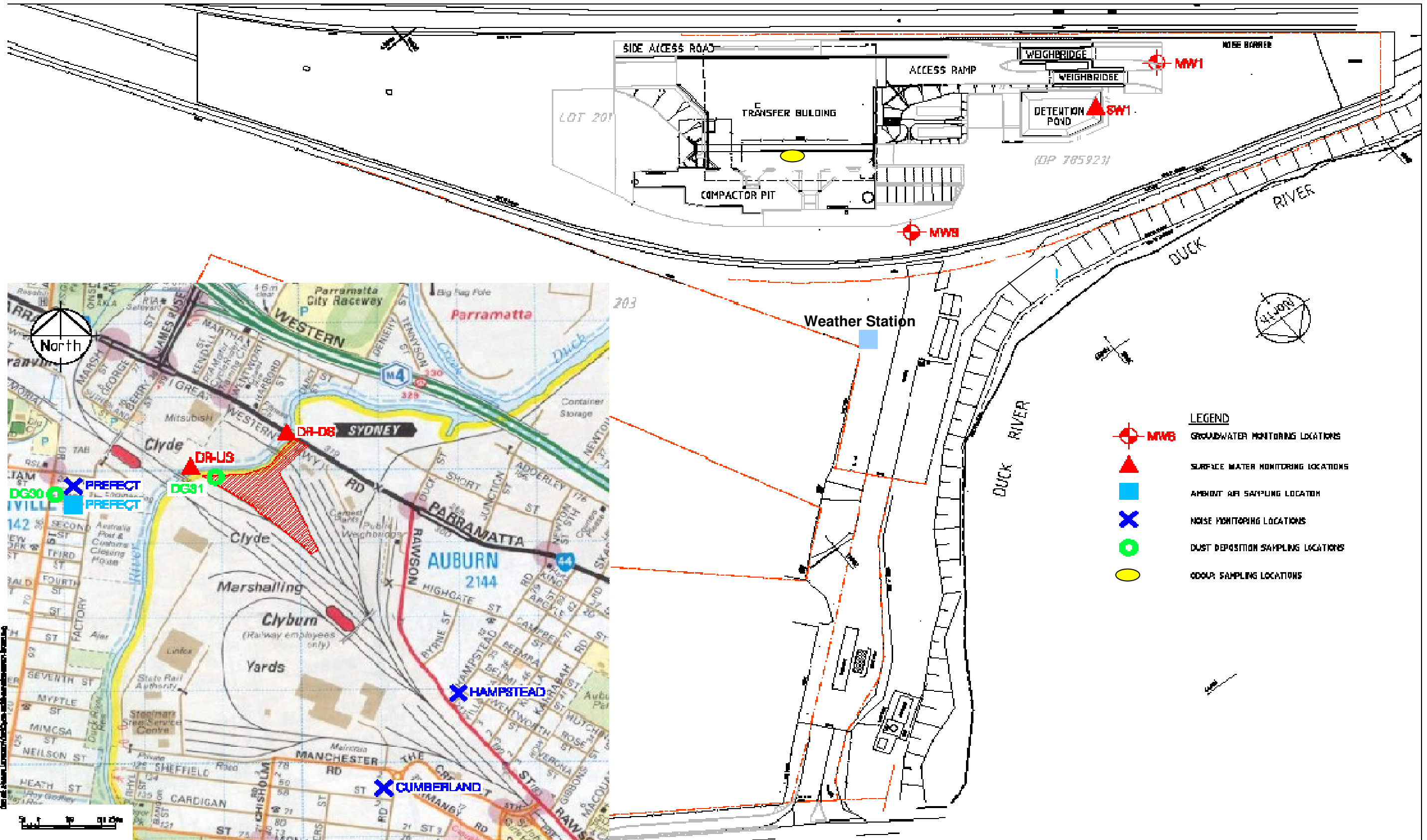
Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
137	<p>Prior to the commencement of construction, or as otherwise approved by the Director-General in consultation with Auburn Council, the Applicant shall take all reasonable steps to negotiate an agreed outcome with Auburn Council for an appropriate level of contribution (financial or in-kind) towards mitigating the social and community impacts resulting from the construction and operation of the development.</p> <p>The contribution shall provide, but not necessarily be limited to, the following:</p> <p>(a) the payment of \$50,000 (unless otherwise agreed to by the Director-General) to Auburn Council as a contribution to the drafting of a masterplan for the entire Clyde Marshalling Yards</p> <p>(b) appropriate monetary lump sum contributions to be negotiated with Auburn Council for the purposes of:</p> <ul style="list-style-type: none"> ▣ the widening of the Western Overbridge; ▣ establishing a vegetated riparian restoration zone along the eastern bank of Duck River from Parramatta Road to the Clyde railway bridge; ▣ establishing a multi-purpose recreation path adjacent to the riparian zone from Parramatta Road to the Clyde railway bridge; <p>and</p> <ul style="list-style-type: none"> ▣ the development and installation of heritage interpretation signage along the multi-purpose recreation path regarding the heritage significance of the Clyde Marshalling Yards and in particular Track 22 and associated pre-use of the area occupied by the development. <p>(c) ongoing or as otherwise agreed to financial contributions proportional to the tonnage throughput of the terminal for the purpose of local community enhancement projects and/or activities in accordance with a community enhancement plan to be prepared by Auburn Council to reflect community priorities and needs.</p> <p><i>Should such a negotiated outcome not be reached, the Applicant shall abide by the requirements of the Director-General concerning community enhancement contribution in light of an independent investigation to establish such contribution. Such investigation is to be carried out by an independent person(s) to be appointed by the Director-General in consultation with the Applicant and Auburn Council.</i></p> <p><i>The commencement of any construction on-site shall not proceed unless the above outcomes have been agreed or otherwise approved by the Director-General in consultation with Auburn Council.</i></p>	NT		Not relevant to the current audit period	
	Elements to be addressed in the Environmental Management Plan (Construction Stage) and the Environmental Management Plan (Operation Stage)				

Clyde Transfer Terminal
2020 Independent Environmental Audit
Determination of a Development Application for State Significant, Development Consent (205-08-01)

Condition Ref	Requirement (Exact Wording)	Audit Finding	Evidence Reviewed	Independent Audit Findings	Unique Identification
Attachment 1	<p>The EMP (Construction Stage) and EMP (Operation Stage) shall address but not be limited to:</p> <ol style="list-style-type: none"> 1. identification of the statutory and other obligations which the Applicant is required to fulfil during construction stage including all approvals and consultations/agreements required from authorities and other stakeholders, and key legislation and policies which control the Applicant's implementation of the development 2. periodic or otherwise revision of the EMP to address changed or evolving circumstances 3. definition of the role, responsibility, authority, accountability and reporting of all personnel relevant (including sub-contractors) to compliance with the construction EMP 4. measures to avoid the occurrence of adverse environmental impacts 5. induction and training of all personnel (including sub-contractors) to ensure compliance with the construction EMP 6. the role of the EMR 7. measures to provide positive environmental offsets to unavoidable adverse environmental impacts 8. environmental management procedures for all construction processes which are important for the quality of the environment in respect of permanent and/or temporary works 9. monitoring, inspection and test plans for all activities and environmental qualities which are important to the environmental management of the project including performance criteria, specific tests, protocols (eg. frequency and location) and procedures to follow including procedures for notifying all relevant authorities should non-compliance with any limits or performance standards specified in the construction EMP arise 10. environmental management instructions for all complex environmental control processes which do not follow common practice or where the absence of such instructions could be potentially detrimental to the environment 11. requirements to undertake environmental audits to ensure that the construction EMP is working and steps the Applicant intends to take to ensure that all plans and procedures are being complied with 12. delegation of responsibilities for compliance with the EMP and relevant environmental statutes 13. community consultation and notification strategy (including the local community and all relevant authorities) and complaint handling procedures 14. project records to be maintained to provide objective evidence of the level of compliance with the construction EMP. 	NT		Not relevant to the current audit period	

Appendix C - Environmental Monitoring Locations Plan



REV	NO	DATE	DESCRIPTION	APPROVED
1	1	2010	ISSUED FOR TENDERS	

Notes concerning the site plan and drawings are contained in the site plan and drawings. The site plan and drawings are provided for information only and do not constitute a contract. The site plan and drawings are provided for information only and do not constitute a contract.



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DESIGN	PREPARED	REVISED	DATE
DATE	2010		

Maunsell
Maunsell Australia Pty Ltd
2010



CLYDE TRANSFER TERMINAL CLYDE SITE MONITORING LOCATIONS	
SKETCH	104-07001-SK895 1

Appendix D - Monitoring Data

Appendix D1 - Meteorological Data

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

26 February 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 26/02/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 26/02/20

Sensor	Actual (field)	Logger
Temperature – 10m*	23.8	23.4
2m*	23.8	23.6
Relative Humidity*	72.1	73.3
Wind Speed	0.6 m/s at ground	1.17 m/s at 10 metres
Wind Direction	4	4.15
Solar Radiation	240	241
TBRG	10mm	20 tips
Battery/Solar	14.1	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0700 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.
4. Replaced bearings and shafts in wind speed and direction sensors.
5. Replaced cups on wind speed sensor.

Clyde 26/02/20

Sensor	Actual (field)	Logger
Temperature – 10m*	28.5	28.4
2m*	28.5	28.3
Relative Humidity*	50	49.1
Wind Speed	2.1 m/s at ground (poor exposure at ground)	2.3 m/s at 10 metres
Wind Direction	320	321
Solar Radiation	570	580
TBRG	10mm	20 tips
Battery/Solar	13.2	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0810 EST as these were testing.

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.



Glen Murphy

Hydrometric Consulting Services Pty Ltd

PO Box 3332

Putney NSW 2112

Mob 0402 134 092

Email glenmurf@ozemail.com.au

www.hydrometric.com.au

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

25 May 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 21/05/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	14.6	14.4
2m*	14.6	14.6
Relative Humidity*	87	100
Wind Speed	0 m/s at ground	0 m/s at 10 metres
Wind Direction	100	100
Solar Radiation	40	41
TBRG	10mm	20 tips
Battery/Solar	13.2	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.
4. The relative humidity sensor is faulty and needs to be replaced.

Clyde 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	16.0	15.5
2m*	16.0	15.3
Relative Humidity*	84	85
Wind Speed	0 m/s at ground (poor exposure at ground)	0.95 m/s at 10 metres
Wind Direction	270	270
Solar Radiation	40	41
TBRG	No calibration	Raining
Battery/Solar	12.6	

* Note 1: Field reading is not inside the radiation shield.

Note 2: No Rain Gauge Calibration - raining

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.

A handwritten signature in black ink, appearing to read 'Glen Murphy'.

Glen Murphy

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Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

17 November 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 16/11/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 16/11/20

Sensor	Actual (field)	Logger
Temperature – 10m*	22.4	22
2m*	22.4	22.3
Relative Humidity*	67	67.8
Wind Speed	0.0 m/s at ground	0.3 m/s at 10 metres
Wind Direction	300	298
Solar Radiation	230	220
TBRG	10mm	19 tips
Battery/Solar	14.0	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.

Clyde 16/11/20

Sensor	Actual (field)	Logger
Temperature – 10m*	32	31
2m*	32	31
Relative Humidity*	37	34
Wind Speed	0.7 m/s at ground (poor exposure at ground)	1.4 m/s at 10 metres
Wind Direction	80	80
Solar Radiation	1000	1100
TBRG	10mm	20 tips
Battery/Solar	13.0	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 1020 EST as these were testing.

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.
3. Hedge trimmed.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.

A handwritten signature in black ink, reading 'Glen Murphy'.

Glen Murphy

Hydrometric Consulting Services Pty Ltd

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Appendix D2 - Odour Monitoring Data



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXV

Final Report

May 2020

THE ODOUR UNIT PTY LTD


ABN 53 09 116 5061
ACN 091 165 061

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Project Number: N1473L

Report Revision		
Revision Number	Date	Description
Draft report	24.06.2020	Issued for internal review
Final report Rev 1	06.07.2020	Final report issued to the client
Report Preparation		
Report Prepared By: J. Schulz & M. Assal		Approved By: M. Assal 
Report Title: Veolia (Australia) Pty Ltd Clyde Waste Transfer Terminal – Odour Audit XXXV		

CONTENTS

1	INTRODUCTION	1
1.1	Odour Audit Period.....	1
1.2	Odour Audit Requirements	1
1.3	Prevailing Weather Conditions During The Odour Audit Visit	2
2	ODOUR AUDIT FINDINGS	3
2.1	Assessment of General Housekeeping	3
2.1.1	Transfer Terminal Building.....	3
2.1.2	Container Packing Area and Site Roadways	3
2.1.3	Odour Management Plan.....	5
2.1.4	Odour Extraction System Maintenance.....	5
2.1.5	Odour Management Procedures/Plan.....	6
2.1.6	Transfer Terminal Building.....	6
2.1.7	Truck Entrance Plastic Strips.....	6
2.1.8	Smoke Testing.....	6
2.1.9	Stormwater Retention Pond.....	8
2.2	Odour Complaints Handling and Meteorological Data	9
2.2.1	Odour Complaints Handling.....	9
2.2.2	Meteorological Data.....	9
2.3	Field Ambient Odour Assessment Methodology	10
2.3.1	Field Ambient Odour Assessment - Results.....	11
3	RECOMMENDATIONS/FOLLOW-UP ACTIONS	12
3.1	Previous Audit Actions	12
3.2	Transfer Terminal Building	12
3.3	Compactor Area	12
3.4	Odour Extraction System	12
3.5	Weather Station	13
3.6	Field Ambient Odour Assessment Survey	13
3.7	Odour Management Procedures/Plan	13
3.8	Concluding Remark.....	13

FIGURES, PHOTOS & TABLES

FIGURES

Figure 2.1 - Smoke testing release points within the TTB on 6 May 2020.....	8
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PHOTOS

Photo 2.1 – TTB waste on-floor as found on 6 May 2020.....	3
Photo 2.2 – A view of the container compacting/packing area as found on 6 May 2020	4
Photo 2.3 – A view of the container area as found on 6 May 2020	5
Photo 2.4 – A view of the truck entrance plastic strips as found on 6 May 2020	7
Photo 2.5 – A view of the truck entrance plastic strips during smoke testing on 6 May 2020	7
Photo 2.6 – Stormwater retention pond as seen on 6 May 2020	9

TABLES

Table 2.1 - VDI 3882 Odour Intensity Categories	10
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APPENDICES

APPENDIX A: Odour Extraction System Service Reports (28 November 2019 - 25 May 2020)

APPENDIX B: Weather Data Calibration Reports (28 November 2019 – 25 May 2020)

APPENDIX C: Field Ambient Odour Assessment Plot and Field Sheets (6 May 2020)

LIST OF ABBREVIATIONS AND DEFINITIONS

FAOA	Field Ambient Odour Assessment
HCS	Hydrometric Consulting Services
the February 2010 OMP	Odour Management Plan dated February 2010
the Odour Audit	Odour Audit XXX covering the six months between 28 November 2019 to 6 May 2020
the September 2017 Container Preparation Document	Waste container preparation requirements for the Site
the September 2017 NSW RR Container Document	<i>NSW Resource Recovery – Container Maintenance</i> dated 15 September 2017
the Site	Veolia Clyde Transfer Terminal
TOU	The Odour Unit Pty Ltd
TTB	Transfer Terminal Building
Veolia	Veolia (Australia) Pty Ltd

UNITS OF MEASUREMENTS

°C	degrees Celsius
m/s	metres per second

1 INTRODUCTION

The Odour Unit Pty Ltd (**TOU**) was commissioned by Veolia (Australia) Pty Ltd (**Veolia**) to undertake the thirty-fifth (**XXXV**) Odour Audit at the Clyde Transfer Terminal (**the Site**) on Wednesday, 6 May 2020. The visit for this odour audit was undertaken by a TOU Senior Engineer & Consultant and is the twenty-fifth (25th) to be carried out since the commissioning of the forced air extraction system within the waste transfer terminal.

1.1 ODOUR AUDIT PERIOD

Odour Audit XXXV covers the six months between 28 November 2019 and 25 May 2020 (**the Odour Audit**).

1.2 ODOUR AUDIT REQUIREMENTS

The Odour Audit requirements originate from the *Conditions of Consent – 48(f)* and are outlined below:

“48. The Odour Management Plan must address, but is not necessarily limited to, the following issues:

(f) An odour audit program which provides for a comprehensive odour audit of the premises and nearby commercial and residential areas, by an independent, appropriately qualified and experienced person, to be conducted 3-monthly for the initial 24 months of receiving un-containerised waste at the terminal, 3-monthly for the 12 months following commissioning the odour control system subject to MOD-133-11-2006, and 6-monthly thereafter, unless otherwise approved in writing by the Director-General.”

As with previous Odour Audits, Odour Audit XXXV focused on issues relating to general housekeeping, fugitive odour emissions from the transfer building, ground level odour impacts, meteorological monitoring, complaints handling, and actions on past odour audit recommendations. Specifically, the Odour Audit approach included:

- A general inspection and smoke testing of the transfer building;
- The inspection of the container packing area and site access roads;
- The examination of the complaint register;
- The review of the on-site meteorological data log and equipment maintenance/calibration;
- The analysis of relevant documentation relating to odour management; and
- The undertaking of an off-site downwind Field Ambient Odour Assessment (**FAOA**) survey.

1.3 PREVAILING WEATHER CONDITIONS DURING THE ODOUR AUDIT VISIT

At the time of the Odour Audit visit, it was light (0.5 metres per second (**m/s**) to 2 m/s) wind speeds with the local wind direction blowing predominately from the north-west. The skies were clear and the ambient temperature during the Odour Audit visit was approximately 22 degrees Celsius (**°C**).

No rainfall was observed during the Odour Audit visit.

2 ODOUR AUDIT FINDINGS

2.1 ASSESSMENT OF GENERAL HOUSEKEEPING

2.1.1 Transfer Terminal Building

During the Odour Audit visit, there were approximately 250 to 300 tonnes of waste on the floor. This tonnage is considered to be within the normal operating range of the Transfer Terminal Building (TTB). The TTB floor area not covered by waste material was observed to be reasonably clean, with little evidence of leachate or aged material. General housekeeping procedures of the TTB were good, as found during several truck-unloading sequences. It was also observed that the TTB's front-end loaders cleared the floor area of waste on a regular basis, minimising the exposed area of waste.

As with previous audits, and consistent with TOU's experience at other waste transfer stations, there was a weak to distinct level of odour observed within the TTB. A photo of the waste on the floor as found during the Odour Audit visit is shown in **Photo 2.1**.



Photo 2.1 – TTB waste on-floor as found on 6 May 2020

2.1.2 Container Packing Area and Site Roadways

The container packing area and site roadways were found to be clean and well managed with no evidence of waste or exposed leachate (see **Photo 2.2**). Like previous odour audits, the container compacting/train packing area had a weak to distinct odour that was intermittently detectable but was confined to this area only (see **Appendix C** for Field Ambient Odour Assessment Survey results). It appeared during the Odour Audit visit that both compactors were in operation. The general

housekeeping around this area was observed to be of high quality, with no evidence to suggest otherwise.

As with previous Odour Audits, the containers are cleaned off-site at Veolia's Woodlawn Bioreactor Facility before being returned to the Site. The weight of each container is monitored to determine if there is any waste that has not been removed completely from each container, which in turn reduces the likelihood of the containers contributing to the Site's odour levels.

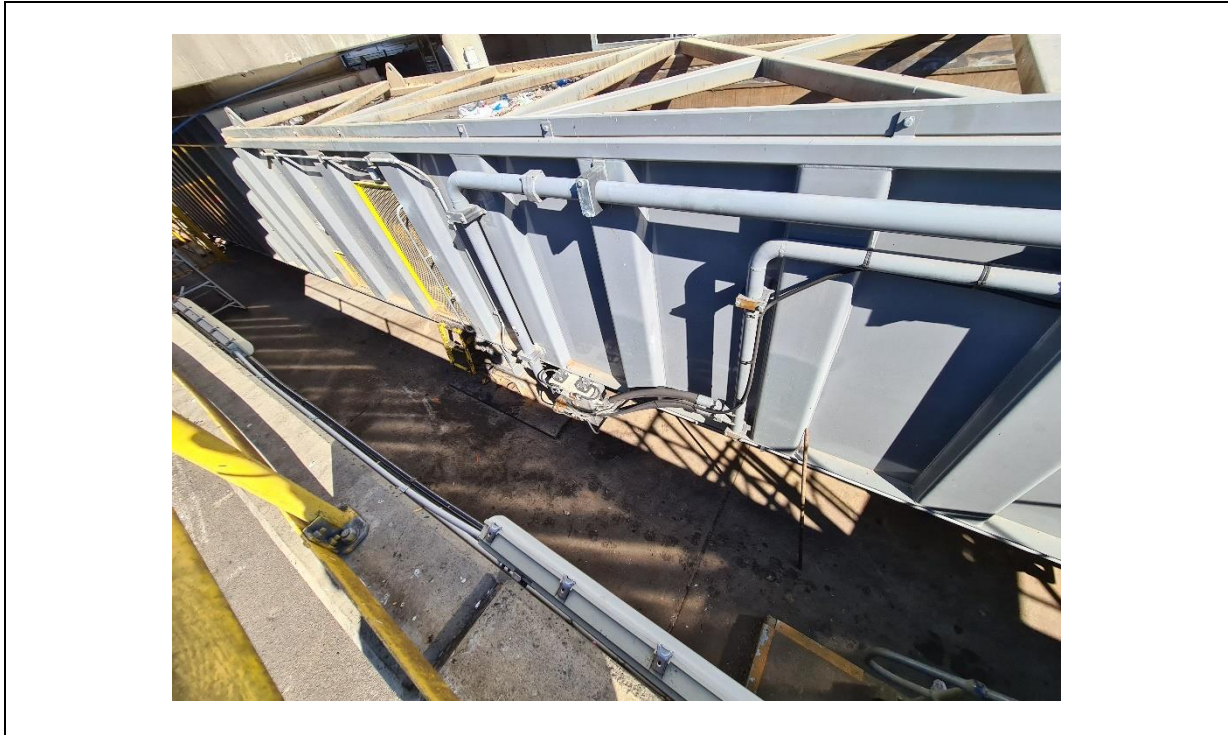


Photo 2.2 – A view of the container compacting/packing area as found on 6 May 2020

2.1.2.1 Container Management and Maintenance

Based on previous verbal discussions with the Veolia team and observations made during the visit, the Odour Audit finds that Veolia continues to implement the policies and procedures as outlined in the following documents:

- The container management and maintenance procedures titled *NSW Resource Recovery – Container Maintenance* dated 15 September 2017 (**the September 2017 NSW RR Container Document**), which details the following:
 - The design of the containers;
 - The maintenance and management of the activated carbon filter retrofitted to the containers;
 - The container management procedure; and
 - The container maintenance procedure.

- The waste container preparation requirements for the Site (**the September 2017 Container Preparation Document**), which details the following:
 - The inspections and actions to be undertaken by operators to enable containers to be prepared to an acceptable standard;
 - The steps to be undertaken should a damaged container be identified; and
 - The steps to be undertaken should a leaking container be identified.

2.1.3 Odour Management Plan

As per the Odour Management Plan dated February 2010 (**the February 2010 OMP**) for the Site, following the compaction of waste, all filled containers are entirely sealed and remain so while at the Site. All containers used are required to be in good condition, and unused/returned containers adequately clean. The Odour Audit finds that this continues to be current practice at the Site. A view of the condition of the compactor area as found on 6 May 2020 is shown in **Photo 2.3**.

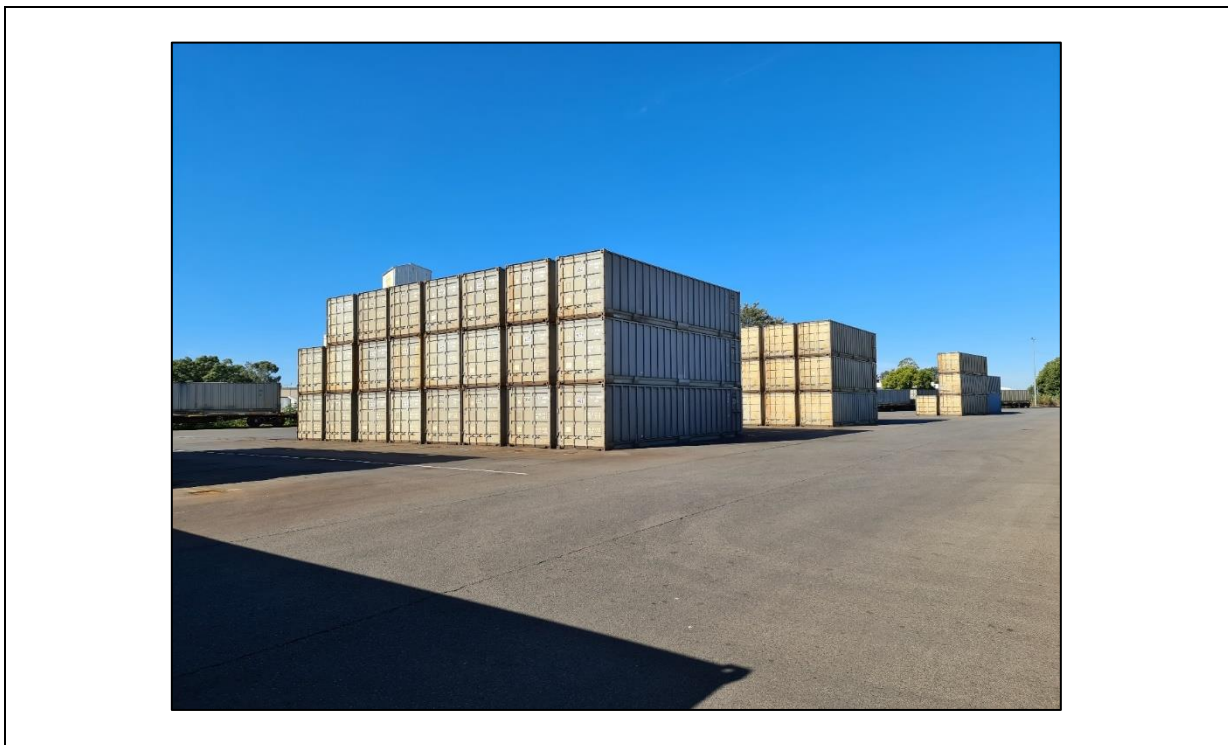


Photo 2.3 – A view of the container area as found on 6 May 2020

2.1.4 Odour Extraction System Maintenance

The service documentation for the maintenance of the odour extraction system was supplied and reviewed as part of the Odour Audit (refer to **Appendix A**). The service logs were provided covering the period between 28 November 2019 to 25 May 2020.

Each service log provided to the Odour Audit indicated that the required inspection and maintenance works were taking place by a suitable service contractor, and the odour extraction system overall was operating efficiently. The service logs during this period noted that all the necessary support works such as checking the fan belts and unit operations, greasing bearings, and other routine preventative maintenance works were being inspected and undertaken.

Given the above and based on the positive results obtained for the smoke testing, odour complaints register, and the FAOA survey conducted as part of the Odour Audit visit, it appears that the current operation of the odour extraction system is satisfactory. However, as stated in previous audits, it is recommended that the discharge stack velocity is regularly reported in future service logs (see **Section 3.4**).

2.1.5 Odour Management Procedures/Plan

The Odour Management Procedures (formerly known as the Odour Minimising Procedures) continue to be regularly reviewed at toolbox meetings, and contemporary issues/recommendations are raised with all staff members at these meetings.

Veolia has advised the Odour Audit that the February 2010 OMP is still in the process of being reviewed and updated.

2.1.6 Transfer Terminal Building

The Odour Audit inspected the fixed metal plates retrofitted along the TTB breezeways in December 2013. All metal plates were found to be intact and in good condition around the TTB. All doors and roller shutters of the TTB were found to be shut at the time of the Odour Audit, reducing the likelihood of odour impacts detected off-site. The louvres on the end walls of the TTB were observed to be permanently shut.

2.1.7 Truck Entrance Plastic Strips

The truck entrance plastic strips of the TTB, used to reduce odour escaping through the opening, were found to be intact and in good condition (see **Photo 2.4**).

2.1.8 Smoke Testing

As per previous audits, smoke testing was carried out within the TTB to assist in determining the effectiveness of the forced air extraction system, as well as the extent to which the TTB has been sealed from leaks. As per previous audits, smoke was released from within the TTB at three points within the TTB. **Figure 2.1** shows the three points where the smoke was released within the TTB. **Photo 2.5** shows smoke testing at the truck entrance of the TTB, which reflects an additional test location to the normal smoke testing release points shown in **Figure 2.1**.



Photo 2.4 – A view of the truck entrance plastic strips as found on 6 May 2020



Photo 2.5 – A view of the truck entrance plastic strips during smoke testing on 6 May 2020

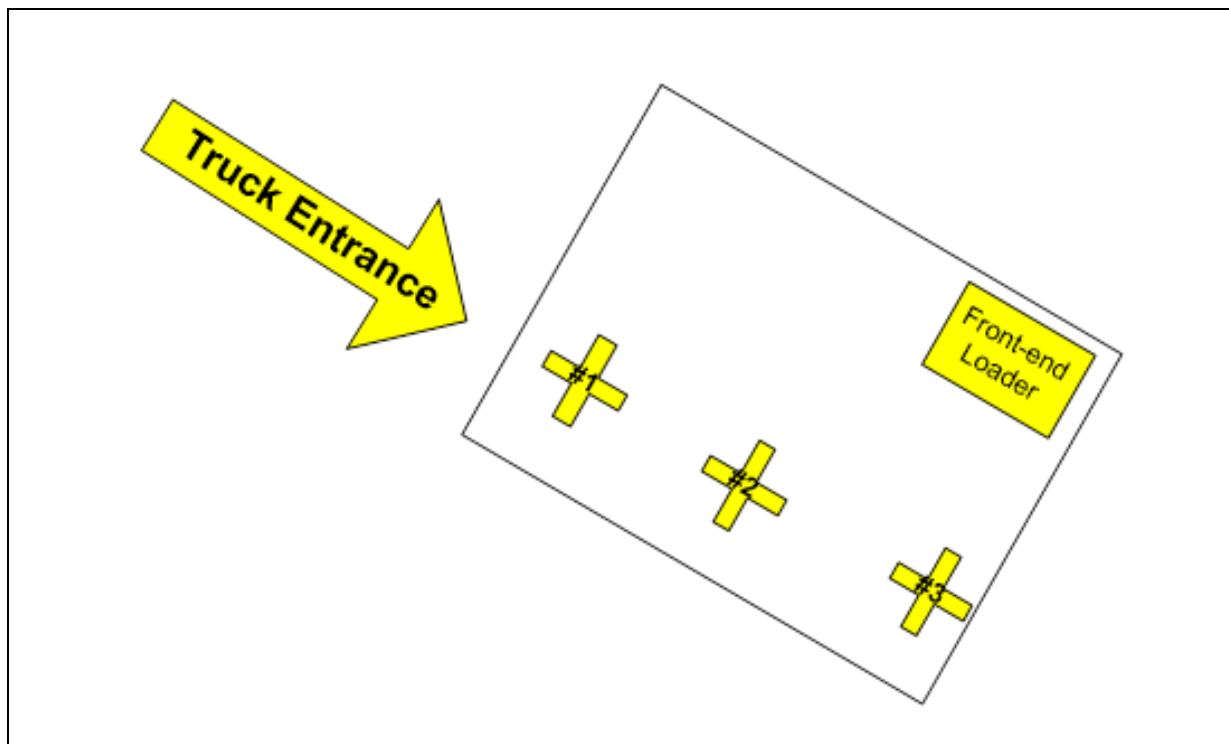


Figure 2.1 - Smoke testing release points within the TTB on 6 May 2020

2.1.8.1 Smoke Testing Results

Smoke Testing Point #1

The smoke released at this point initially rose gradually moving towards the truck entrance before rising to the roof and moving slowly towards the extraction system. Visible smoke extraction at the overhead capture points was evident during the smoke testing at this point. Any smoke that continued towards the truck entrance was drawn back into the building (see shown in **Photo 2.5**). However, TOU did visibly observe a slight bias in distribution at the overhead capture points closet to the truck entrance door compared with the other overhead capture points, suggesting that the balance for the odour extraction system may require checking, cleaning and balancing.

Smoke Testing Point #2

The smoke released at this point revealed a similar result to that documented for smoke testing point #1.

Smoke Testing Point #3

The smoke released at this point revealed a similar result to that documented for smoke testing point #1.

2.1.9 Stormwater Retention Pond

The auditor observed that there was effluent in this pond at the time of the Odour Audit visit. **Photo 2.6** shows the state of the pond as found on 6 May 2020.



Photo 2.6 – Stormwater retention pond as seen on 6 May 2020

2.2 ODOUR COMPLAINTS HANDLING AND METEOROLOGICAL DATA

2.2.1 Odour Complaints Handling

As advised by Veolia personnel, there have been no complaints recorded in the Site's complaints register since March 2012.

2.2.2 Meteorological Data

The meteorological data provided to the Odour Audit, covering the period of between 28 November 2019 and 6 May 2020, was inspected and found to be in good order. As found in previous Odour Audits, the observations were provided in daily 15-minute intervals and included all parameters necessary to develop a meteorological dataset for odour dispersion modelling.

As indicated via service records completed by Hydrometric Consulting Services (**HCS**) supplied by Veolia to the Odour Audit, the weather station continues to remain located in an accessible area with the solar panel and components regularly cleaned, and installation sprayed periodically for insects and trimming of nearby vegetation as required to ensure no overgrowth immediately around the weather station pole. Overall, HCS indicated that the weather stations were operating well, and any identified issues were rectified.

The weather data calibration and service reports by HCS are appended as **Appendix B**.

2.3 FIELD AMBIENT ODOUR ASSESSMENT METHODOLOGY

At present, no Australian Standard exists for field-based ambient odour assessment surveys. Consequently, TOU utilises a method for assessing the ground-level impacts of odour emissions using a modified version of the German Standard VDI 3940 (1993) – *‘Determination of Odorants in Ambient Air by Field Inspections’*.

Field-based ambient odour surveys are considered a valuable odour impact assessment tool as previous experience with ambient odour sampling and subsequent olfactometry testing suggests that accurate and useful ambient odour concentration data is difficult to obtain. Therefore, TOU has adopted a more practical approach based on the field measurement of odour intensity. With this method, calibrated and experienced odour specialists traverse the downwind surrounds of odour sources in a strategically mapped pattern, assessing the presence, character and intensity of any odours encountered and recording these observations along with wind speed and direction.

An ambient odour assessment was performed on 6 May 2020 between 1426 hrs and 1520 hrs. The FAOA survey was undertaken at strategic locations, both on-site and off-site. The ambient odour assessment focus was off-site, as required by the Conditions of Consent on “.....nearby commercial and residential areas.....” (Section 48 (f)). The TOU assessor firstly determined the wind direction using a Kestrel 4500 Pocket Weather Tracker Anemometer and then assessed locations of the TTB downwind.

The assessors spent approximately five minutes at each assessment location to gauge the effects of any odour impact. If an odour was detected at a location, the assessors attempted to characterise it. The general aim was to determine the extent of the impact of odours off-site and rank their intensity. The ranking scale for the German Standard VDI 3940 *‘Determination of Odorants in Ambient Air by Field Inspections’* was used for the intensity assessments. The standard’s ranking system is based on the following seven-point intensity scale, as shown in **Table 2.1** below.

Table 2.1 - VDI 3882 Odour Intensity Categories

Odour Strength	Intensity Rank (code)	TOU Interpretation (meaning)
Not detectable	0	No odour detected
Very weak	1	Odour detected but not strong enough to be characterised
Weak	2	Odour is weak but just able to be characterised
Distinct	3	Odour is distinct and easily characterised
Strong	4	Strong odour detectable
Very Strong	5	If offensive, the observer may consider moving from the area
Extremely Strong	6	Odour is sufficiently over-powering that assessor moves from the area

2.3.1 Field Ambient Odour Assessment - Results

The results of the FAOA survey conducted during the Odour Audit found that whilst intermittent odours were detected on-site, no odours were detectable off-site that could be linked back to the Site and its activities.

The field log sheets and visual survey plot are appended as **Appendix C**.

3 RECOMMENDATIONS/FOLLOW-UP ACTIONS

3.1 PREVIOUS AUDIT ACTIONS

The following list provides an outline of the last November 2019 odour audit actions and status as of the Odour Audit:

- **Previous Audit Action 1:** *Action 1 – All stack discharge velocity and airflow measurements collected during a service visit should be reported in future service logs.*

Status: Outstanding (see **Section 3.4** for more details).

- **Previous Audit Action 2:** *Action 2 - Future datasets should be provided in 15-minute increments, as with previous odour audits.*

Status: Complete (see **Section 2.2.2**).

- **Previous Audit Action 3 -** *Veolia to continue its review and update of the OMP for the Site.*

Status: Outstanding (see **Section 3.7**).

3.2 TRANSFER TERMINAL BUILDING

All metal plates were found to be intact and in good condition around the TTB. All doors and roller shutters of the TTB were found to be shut at the time of the Odour Audit, reducing the likelihood of odour impacts detected off-site. The louvres on the end walls of the TTB were observed to be permanently shut. Overall, the TTB was found to be well managed.

Based on the findings in the Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.3 COMPACTOR AREA

The general housekeeping around the compactor area was observed to be of high quality, with no evidence to suggest otherwise. As with previous Odour Audits, the container compacting/train packing area had a weak to distinct odour that was intermittently detectable but was found to be confined to this area only.

Based on the findings in this Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.4 ODOUR EXTRACTION SYSTEM

The service logs indicate that all required maintenance works on the odour extraction system since the previous November 2019 odour audit have been adequately

undertaken, and the odour extraction system is operating in a satisfactory condition. However, it is recommended that the discharge stack velocity is regularly reported in future service logs.

Based on the findings in the Odour Audit, the following action is recommended:

- **Action 1 – All stack discharge velocity and airflow measurements collected during a service visit should be reported in future service logs; and**
- **Action 2 - The odour extraction system to be checked, cleaned and balanced.**

3.5 WEATHER STATION

The calibration and service reports from HCS indicate that all maintenance to the weather station and required calibrations were carried out as needed.

Based on the findings in the Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.6 FIELD AMBIENT ODOUR ASSESSMENT SURVEY

The results of the FAOA survey conducted during the Odour Audit found that no odours were detectable off-site that could be linked back to the Site and its activities.

3.7 ODOUR MANAGEMENT PROCEDURES/PLAN

At the timing of the writing of the Odour Audit, the February 2010 OMP was last updated over seven years ago. Given the previous update, it is suggested that as part of good practice that Veolia reviews and update the February 2010 OMP to ensure it continues to reflect the odour management procedures implemented and followed at the Site. Veolia has advised the Odour Audit that the February 2010 OMP is in the process of being reviewed and updated.

Based on the findings in this Odour Audit, the following action/s is recommended:

- **Action 3 – Veolia to continue its review and update of the OMP for the Site.**

3.8 CONCLUDING REMARK

Overall, this Odour Audit found that the operation and maintenance of the odour management system at the Site was satisfactory. There was no evidence to suggest that significant fugitive odour emission release from the Site is occurring.

The next Odour Audit is due in **November 2020**.



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXV

Appendices

May 2020



APPENDIX A:

ODOUR EXTRACTION SYSTEM SERVICE REPORT (28 NOVEMBER
2019 – 25 MAY 2020)

BSA | Maintain



Triple M - NSW - Service Docket

ID 222692

Time Start Tue Dec 03 2019 08:08:41 GMT+1100 (AEDT)

Client Details CLYDE WASTE

Address 322 Parramatta Rd Clyde NSW 2142

Site Contact Name Ash Turner

Site Contact Telephone Number 2 02 8868 7401

Customer Ref Number 7100156359

Type of Service Preventative Maintenance - PM

Job / Service Call Number 1237433

Fault Description CLYDE WASTE - PM November L1 - MONTHLY

Asset List EQUIP-M_Whole of Site - Mech_MONTHLY _Qty:1

Job Safety Analysis Completed YES

Description of Work Done
Attended site to carry out maintenance. Cleaned the dampers and lights and brushed down the vsds, found that on EF no 2 the belts were starting the crack and will need replacing. Noted down belt size to order in.

Parts, Materials? No

Refrigerant Used? No

Job Status Completed

Technician's Signature 

Forwarding Email rod.jones@veolia.com

Normal Hours 0

Time and a Half 0

Double Time 0

User ID TMS-ZBN

ID	222692
Technician Name	ZACHARY JAMES BROWN
IFORMS Record ID	222692
Record Location	Latitude:-33.775782, Longitude:150.917147, Altitude:58.313778, Speed:0.000000, Horizontal Accuracy:5.000000, Vertical Accuracy:4.000000, Time:12/03/2019 12:20:48 AEDT
Total Hrs	0
Time Completed	2019-12-03 08:08:41

SECURE

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Triple M - NSW - Service Docket



ID	226214
Time Start	Thu Jan 09 2020 08:14:33 GMT+1100 (AEDT)
Client Details	CLYDE WASTE
Address	322 Parramatta Rd Clyde NSW 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100156359
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1243337
Ult Description	CLYDE WASTE - PM December L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1]
Job Safety Analysis Completed	YES
Description of Work Done	Arrived on site and signed in, isolated the extraction fans. Dusted down the VSDs and the Dampers. Removed belt cover to check belts, belts on extraction fan 2 are cracking and have been approved for replacement. Dusted down all the lights in the room. Tested the fan alarm to ensure it was working correctly.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Rod jones
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Forms Record ID	226214
Record Location	Latitude:-33.837524, Longitude:151.021837, Altitude:3.515408, Speed:0.000000, Horizontal Accuracy:10.000000, Vertical Accuracy:4.000000, Time:01/09/2020 11:56:19 AEDT
Total Hrs	0
Time Completed	2020-01-09 08:14:33

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Triple M - NSW - Service Docket

ID	227132
Time Start	Thu Jan 16 2020 13:48:27 GMT+1100 (AEDT)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	MICHAEL LYE
Site Contact Telephone Number 2	0403 262 785
Customer Ref Number	
Type of Service	Quoted Call - QC
Job / Service Call Number	1250776
Ult Description	REPLACE BELTS ON FAN
Job Safety Analysis Completed	YES
Asset Type Affected	EXTRACTION SYSTEM
Description of Work Done	Arrived on site and completed quoted works of supplying and installing new belts on extraction fan 2. Removed fan covers and removed the belts, installed new belts and put the cover back together. Tested to make sure the system was running and packed up.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Od Jones
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Iforms Record ID	227132
Record Location	Latitude:-33.837567, Longitude:151.021434, Altitude:6.709927, Speed:0.000000, Horizontal Accuracy:10.000000, Vertical Accuracy:4.000000, Time:01/16/2020 13:52:43 AEDT
Total Hrs	0
Time Completed	2020-01-16 13:48:27

Job Safety Analysis

ID	S227132
Are you an Apprentice?	Yes

Job Safety Analysis

ID	S227132
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1250776
Work to be done.	REPLACE BELTS ON FAN
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Ladder secured.	1
Barrier(s) installed around work area.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	No
Is it safe for you to proceed with your job.	Yes

Technician's Signature



PPE Title

Gloves, Long Pants, Safety Glasses, Electrical Test Equipment, Safety Boots/Shoes

TMP Work Order No

Email Report



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Triple M - NSW - Service Docket

ID	229577
Time Start	Mon Feb 10 2020 14:33:27 GMT+1100 (AEDT)
Client Details	CLYDE WASTE
Address	322 Parramatta Rd Clyde NSW 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100156359
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1250269
Fault Description	CLYDE WASTE - PM January L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance on the 2 extraction fans and dusted down all dampers, lights and vsds. Tested the fan alarm aswell.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Rod Jones.
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Forms Record ID	229577
Record Location	Latitude:-33.837221, Longitude:151.022596, Altitude:-10.393859, Speed:0.000000, Horizontal Accuracy:400.000000, Vertical Accuracy:28.964931, Time:02/10/2020 14:36:11 AEDT
Total Hrs	0
Time Completed	2020-02-10 14:33:27

Job Safety Analysis

ID	S229577
Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No

Job Safety Analysis

ID	S229577
Job/Service Call Number	1250269
Work to be done.	CLYDE WASTE - PM January L1 - MONTHLY
Protective Equipment to be Used During Works	Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	No
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Ladder secured.	1
Barrier(s) installed around work area.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	No
Is it safe for you to proceed with your job.	Yes

Technician's Signature



PPE Title

Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes



TMP Work Order No

Email Report

BSA Mobile Business Technologies, a Division of BSA Ltd


Triple M - NSW - Service Docket

Record: 232784

Time Start	Thu Mar 12 2020 11:12:54 GMT+1100 (AEDT)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1264888
Fault Description	CLYDE WASTE - PM March L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance as scheduled on the 2 extraction fans and dusted lights and dampers.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Rod jone
Forwarding Email	rod.jones@veolaa.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Iforms Record ID	232784
Record Location	Latitude:-33.837499, Longitude:151.022216, Altitude:8.687649, Speed:0.210000, Horizontal Accuracy:30.000000, Vertical Accuracy:4.000000, Time:03/12/2020 11:14:27 AEDT
Total Hrs	0
Time Completed	2020-03-12 11:12:54



Mobile Data Capture Report

Job Safety Analysis

Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1264888
Work to be done.	CLYDE WASTE - PM March L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Ladder secured.	1
Barrier(s) installed around work area.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	Yes
Sign in & out of your worksite.	1
Keep in regular contact with your supervisor/coordinator (arriving/leaving site).	1
Is it safe for you to proceed with your job.	Yes
Technician's Signature	
PPE Title	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes
TMP Work Order No	


Triple M - NSW - Service Docket

Record: 236383

Time Start	Tue Apr 21 2020 14:41:34 GMT+1000 (AEST)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1272452
Fault Description	CLYDE WASTE - PM April L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance of 2 extraction fans checking pulleys and belts. Dusted the dampers and VSDs and swept up the floor near the extraction fans.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Rod Jones
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Forms Record ID	236383
Record Location	Latitude:-33.835808, Longitude:151.023416, Altitude:18.173058, Speed:-1.000000, Horizontal Accuracy:2613.961836, Vertical Accuracy:17.111671, Time:04/21/2020 14:44:14 AEST
Total Hrs	0
Time Completed	2020-04-21 14:41:34

Mobile Data Capture Report

Job Safety Analysis

Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1272452
Work to be done.	CLYDE WASTE - PM April L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Barrier(s) installed around work area.	1
Extension ladders to be pitched a slope of 4:1, on a firm level surface.	1
Extension ladder to extend at least 1 metre over the landing.	1
Extension ladder to be tied or footed.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1
Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	No
Is it safe for you to proceed with your job.	Yes
Technician's Signature	
PPE Title	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Electrical Test Equipment, Safety Boots/Shoes
TMP Work Order No	



APPENDIX B:

**WEATHER DATA CALIBRATION REPORTS (28 NOVEMBER 2019 – 25
MAY 2020)**

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

25 May 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 21/05/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	14.6	14.4
2m*	14.6	14.6
Relative Humidity*	87	100
Wind Speed	0 m/s at ground	0 m/s at 10 metres
Wind Direction	100	100
Solar Radiation	40	41
TBRG	10mm	20 tips
Battery/Solar	13.2	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.
4. The relative humidity sensor is faulty and needs to be replaced.

Clyde 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	16.0	15.5
2m*	16.0	15.3
Relative Humidity*	84	85
Wind Speed	0 m/s at ground (poor exposure at ground)	0.95 m/s at 10 metres
Wind Direction	270	270
Solar Radiation	40	41
TBRG	No calibration	Raining
Battery/Solar	12.6	

* Note 1: Field reading is not inside the radiation shield.

Note 2: No Rain Gauge Calibration - raining

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.



Glen Murphy

Hydrometric Consulting Services Pty Ltd

PO Box 3332

Putney NSW 2112

Mob 0402 134 092

Email glenmurf@ozemail.com.au



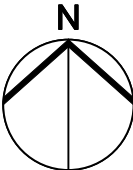
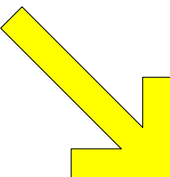
www.hydrometric.com.au



APPENDIX C:

**FIELD AMBIENT ODOUR ASSESSMENT PLOT AND FIELD SHEETS (6
MAY 2020)**



DESCRIPTION Field Ambient Odour Assessment Survey Modified German Standard VDI 3940		LEGEND German Intensity Scale VDI3882 0 Not detectable 1 Very weak 2 Weak 3 Distinct 4 Strong 5 Very strong 6 Extremely strong		 Veolia (Australia) Pty Ltd Clyde Transfer Terminal, Clyde, NSW Field Ambient Odour Assessment Survey Survey Date: 06 May 2020 Survey Time Period: 1426 hrs to 1520 hrs		
	THE ODOUR UNIT PTY LTD Level 3, 12/56 Church Avenue MASCOT, NSW 2020 Phone: (02) 9209 4420 – Fax: (02) 9209 4421 www.odourunit.com.au		DRAWN BY	J.SCHULZ 13/05/2020	Odour Audit XXXII Field Ambient Odour Assessment Survey	Plot No. N1473-XXXV
			CHECKED	M.ASSAL 15/05/2020		Job No. N1473L
			APPROVED	M.ASSAL 15/05/2020		
		Local wind direction 		Local wind conditions Light to moderate (0.5 m/s – 2 m/s), with winds blowing from the north-west. No rainfall observed. Refer to FAOA Logsheet N1473L-XXXV for details on recorded odour detections		



THE ODOUR UNIT PTY LTD

Level 3, 12/56 Church Avenue
MASCOT NSW 2020

Phone: +61 2 9209 4420
Facsimile: +61 2 9209 4421
Email: info@odourunit.com.au
Internet: www.odourunit.com.au
ABN: 53 091 165 061

Field Ambient Odour Assessment Log Sheet

Date: 6 May 2020

Assessor: J. Schulz

Weather Conditions: Light to moderate (0.5 m/s to 2 m/s) wind speeds blowing from the north-west. No rainfall observed.

Survey Reference Plot No: N1473L-XXXV

GRIF REF. POSITION	MEASUREMENT TIME PERIOD (hrs)	WIND DIRECTION	WIND SPEED (m/s)	ODOUR PRESNT (Y/N)	ODOUR CHARACTER	VDI 3940 INTENSITY SCALE 0-6	COMMENTS
1	1426 – 1431	WNW	1 – 2	N	-	0	-
2	1435 – 1440	NW – NNW	1	N	-	0	-
3	1445 – 1450	NW	1 – 2	N	-	0	-
4	1453 – 1458	NW	1 - 2	N	-	0	-
5	1503 – 1508	NW – NNW	1 – 2	N	-	0	-
6	1515 – 1520	NW – NNW	1 – 2	N	-	0	-



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXVI

Final Report

November 2020

THE ODOUR UNIT PTY LTD

ABN 53 09 116 5061
ACN 091 165 061

Level 3, 12/56 Church Avenue
MASCOT NSW 2020

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Project Number: N1473L

Report Revision		
Revision Number	Date	Description
Draft report	23.02.2021	Issued for internal review
Final report Rev 1	07.03.2021	Final report issued to the client
Final report Rev 2	08.03.2021	Final report issued with minor edits
Report Preparation		
Report Prepared By: J. Schulz & M. Assal		Approved By: M. Assal
Report Title: Veolia (Australia) Pty Ltd Clyde Waste Transfer Terminal – Odour Audit XXXVI		

CONTENTS

1	INTRODUCTION	1
1.1	Odour Audit Period	1
1.2	Odour Audit Requirements.....	1
1.3	Prevailing Weather Conditions During The Odour Audit Visit	2
2	ODOUR AUDIT FINDINGS	3
2.1	Assessment of General Housekeeping	3
2.1.1	Transfer Terminal Building.....	3
2.1.2	Container Packing Area and Site Roadways	3
2.1.3	Odour Management Plan.....	4
2.1.4	Odour Extraction System Maintenance	5
2.1.5	Odour Management Procedures/Plan	6
2.1.6	Transfer Terminal Building.....	6
2.1.7	Truck Entrance Plastic Strips.....	6
2.1.8	Smoke Testing.....	7
2.1.9	Stormwater Retention Pond.....	9
2.2	Odour Complaints Handling and Meteorological Data	10
2.2.1	Odour Complaints Handling.....	10
2.2.2	Meteorological Data	10
2.3	Field Ambient Odour Assessment Methodology	10
2.3.1	Field Ambient Odour Assessment - Results	12
3	RECOMMENDATIONS/FOLLOW-UP ACTIONS	13
3.1	Previous Audit Actions	13
3.2	Transfer Terminal Building.....	13
3.3	Compactor Area.....	13
3.4	Odour Extraction System	14
3.5	Weather Station	14
3.6	Field Ambient Odour Assessment Survey.....	14
3.7	Odour Management Procedures/Plan.....	14
3.8	Concluding Remark	14

FIGURES, PHOTOS & TABLES

FIGURES

Figure 2.1 - Smoke testing release points within the TTB on 19 November 2020 8

PHOTOS

Photo 2.1 – TTB waste on-floor as found on 19 November 2020 3

TABLES

Table 2.1 - VDI 3882 Odour Intensity Categories 12

APPENDICES

APPENDIX A: Odour Extraction System Service Reports (26 May 2020 - 26 October 2020)

APPENDIX B: Weather Data Calibration Reports (26 May 2020 – 19 November 2020)

APPENDIX C: Field Ambient Odour Assessment Plot and Field Sheets (19 November 2020)

LIST OF ABBREVIATIONS AND DEFINITIONS

FAOA	Field Ambient Odour Assessment
HCS	Hydrometric Consulting Services
the Draft OEMP	The draft version of the <i>Operational Environmental Management Plan</i> dated 6 November 2020
the February 2010 OMP	Odour Management Plan dated February 2010
the Odour Audit	Odour Audit XXXI covering the six months between 6 May 2020 to 19 November 2020
the September 2017 Container Preparation Document	Waste container preparation requirements for the Site
the September 2017 NSW RR Container Document	<i>NSW Resource Recovery – Container Maintenance</i> dated 15 September 2017
the Site	Veolia Clyde Transfer Terminal
TOU	The Odour Unit Pty Ltd
TTB	Transfer Terminal Building
Veolia	Veolia (Australia) Pty Ltd

UNITS OF MEASUREMENTS

°C	degrees Celsius
m/s	metres per second

1 INTRODUCTION

The Odour Unit Pty Ltd (**TOU**) was commissioned by Veolia (Australia) Pty Ltd (**Veolia**) to undertake the thirty-sixth (**XXXVI**) Odour Audit at the Clyde Transfer Terminal (**the Site**) on Thursday, 19 November 2020. The visit for this odour audit was undertaken by a TOU Senior Engineer & Consultant and is the thirty-sixth (36th) to be carried out since the commissioning of the forced air extraction system within the waste transfer terminal.

1.1 ODOUR AUDIT PERIOD

Odour Audit XXXV covers the six months between 25 May 2020 and 19 November 2020 (**the Odour Audit**).

1.2 ODOUR AUDIT REQUIREMENTS

The Odour Audit requirements originate from the *Conditions of Consent – 48(f)* and are outlined below:

“48. The Odour Management Plan must address, but is not necessarily limited to, the following issues:

(f) An odour audit program which provides for a comprehensive odour audit of the premises and nearby commercial and residential areas, by an independent, appropriately qualified and experienced person, to be conducted 3-monthly for the initial 24 months of receiving un-containerised waste at the terminal, 3-monthly for the 12 months following commissioning the odour control system subject to MOD-133-11-2006, and 6-monthly thereafter, unless otherwise approved in writing by the Director-General.”

As with previous Odour Audits, Odour Audit XXXVI focused on issues relating to general housekeeping, fugitive odour emissions from the transfer building, ground level odour impacts, meteorological monitoring, complaints handling, and actions on past odour audit recommendations. Specifically, the Odour Audit approach included:

- A general inspection and smoke testing of the transfer building;
- The inspection of the container packing area and site access roads;
- The examination of the complaint register;
- The review of the on-site meteorological data log and equipment maintenance/calibration;
- The analysis of relevant documentation relating to odour management; and
- The undertaking of an off-site downwind Field Ambient Odour Assessment (**FAOA**) survey.

1.3 PREVAILING WEATHER CONDITIONS DURING THE ODOUR AUDIT VISIT

At the time of the Odour Audit visit, it was light (0.5 metres per second (**m/s**) to 2 m/s) wind speeds with the local wind direction blowing predominately from the north-west. The skies were clear and the ambient temperature during the Odour Audit visit was approximately 25 degrees Celsius (**°C**).

No rainfall was observed during the Odour Audit visit.

2 ODOUR AUDIT FINDINGS

2.1 ASSESSMENT OF GENERAL HOUSEKEEPING

2.1.1 Transfer Terminal Building

During the Odour Audit visit, there were approximately 300 to 400 tonnes of waste on the floor. This tonnage is considered to be within the normal operating range of the Transfer Terminal Building (TTB). The TTB floor area not covered by waste material was observed to be reasonably clean, with little evidence of leachate or aged material. General housekeeping procedures of the TTB were good, as found during several truck-unloading sequences. It was also observed that the TTB's front-end loaders cleared the floor area of waste on a regular basis, minimising the exposed area of waste.

As with previous audits, and consistent with TOU's experience at other waste transfer stations, there was a weak to distinct level of odour observed within the TTB. A photo of the waste on the floor as found during the Odour Audit visit is shown in **Photo 2.1**.

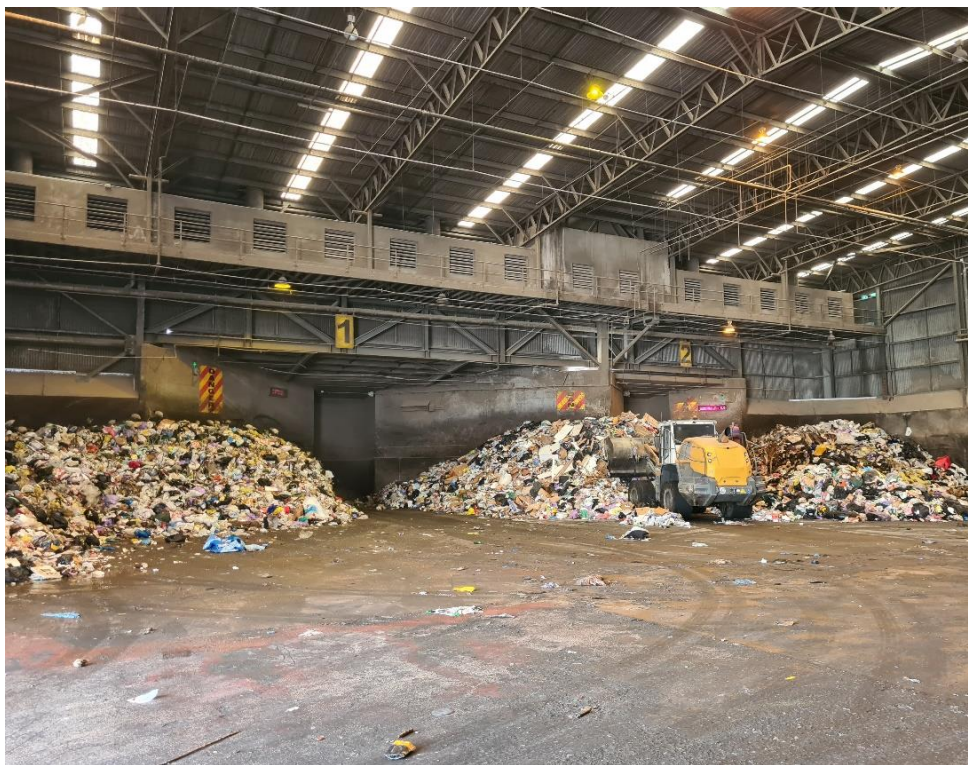


Photo 2.1 – TTB waste on-floor as found on 19 November 2020

2.1.2 Container Packing Area and Site Roadways

The container packing area and site roadways were found to be clean and well managed with no evidence of waste or exposed leachate. Like previous odour audits, the container compacting/train packing area had a weak to distinct odour that was

intermittently detectable but was confined to this area only (see **Appendix B** for Field Ambient Odour Assessment Survey results). TOU was advised by a Veolia personnel that one of the two compactors were in operation at the time of the Odour Audit visit. The general housekeeping around this area was observed to be of high quality, with no evidence to suggest otherwise.

As with previous Odour Audits, the containers are cleaned off-site at Veolia's Woodlawn Bioreactor Facility before being returned to the Site. The weight of each container is monitored to determine if there is any waste that has not been removed completely from each container, which in turn reduces the likelihood of the containers contributing to the Site's odour levels.

2.1.2.1 Container Management and Maintenance

Based on previous verbal discussions with the Veolia team and observations made during the visit, the Odour Audit finds that Veolia continues to implement the policies and procedures as outlined in the following documents:

- The container management and maintenance procedures titled *NSW Resource Recovery – Container Maintenance* dated 15 September 2017 (**the September 2017 NSW RR Container Document**), which details the following:
 - The design of the containers;
 - The maintenance and management of the activated carbon filter retrofitted to the containers;
 - The container management procedure; and
 - The container maintenance procedure.
- The waste container preparation requirements for the Site (**the September 2017 Container Preparation Document**), which details the following:
 - The inspections and actions to be undertaken by operators to enable containers to be prepared to an acceptable standard;
 - The steps to be undertaken should a damaged container be identified; and
 - The steps to be undertaken should a leaking container be identified.

2.1.3 Odour Management Plan

As per the Odour Management Plan dated February 2010 (**the February 2010 OMP**) for the Site, following the compaction of waste, all filled containers are entirely sealed and remain so while at the Site. All containers used are required to be in good condition, and unused/returned containers adequately clean. The Odour Audit finds that this continues to be current practice at the Site. A view of the condition of the container area as found on 19 November 2020 is shown in **Photo 2.2**.



Photo 2.2 – A view of the container area as found on 19 November 2020

2.1.4 Odour Extraction System Maintenance

The service documentation for the maintenance of the odour extraction system was supplied and reviewed as part of the Odour Audit (refer to **Appendix A**). The service logs were provided covering the period between 26 May 2020 to 26 October 2020.

Each service log provided to the Odour Audit indicated that the required inspection and maintenance works were taking place by a suitable service contractor, and the odour extraction system overall was operating efficiently. The service logs during this period noted that all the necessary support works such as checking the fan belts and unit operations, greasing bearings, and other routine preventative maintenance works were being inspected and undertaken.

Given the above and based on the positive results obtained for the smoke testing, odour complaints register, and the FAOA survey conducted as part of the Odour Audit visit, it appears that the current operation of the odour extraction system is satisfactory.

2.1.4.1 Airflow Measurement Results

The odour extraction system airflow performance was assessed on 25 June 2020 by Independent Air Flow Services (refer to **Appendix A**). During this assessment, airflow measurements were collected from the odour extraction system exhaust air discharge stack and velocity profile across all the ventilation extraction louvers within the TTB.

Based on the outcomes from this assessment, the following outcomes were documented:

- The average exhaust stack discharge velocity is 19.19 m/s. This is a good result and statistically consistent with the target performance value of 19.5 m/s; and
- The measured velocity profile of all ventilation extraction louver grilles indicated a mean velocity of 7.3 m/s, with a standard deviation of ± 2.0 m/s (equivalent to 28% deviation from the mean). This suggests a modest variability in the velocity profile across the ventilation extraction louver grilles. However, it is noted that the method in which the velocity measurements were collected (i.e. 150 mm from the extraction louver grille face) does lend itself to a high variability in measurement uncertainty. As such, the measured velocity measurements and derived airflow values for the ventilation extraction louver grilles are likely to be overstated. Notwithstanding this, given the exhaust stack discharge velocity measurement is within the target performance value and findings of the Odour Audit, this is not considered to be an issue.

2.1.5 Odour Management Procedures/Plan

The Odour Management Procedures (formerly known as the Odour Minimising Procedures) continue to be regularly reviewed at toolbox meetings, and contemporary issues/recommendations are raised with all staff members at these meetings.

Veolia has advised the Odour Audit that the February 2010 OMP is still in the process of being reviewed and updated. However, TOU was provided a copy of the draft *Operational Environmental Management Plan* for the Site dated 6 November 2020 (the **Draft OEMP**). Upon finalisation of the Draft OEMP and consolidation of all referenced documents, the Odour Audit will review this document in its entirety. Nevertheless, the annual review and commitment to continuous improvement to the operational and environmental management procedures and practices at the Site is endorsed by the Odour Audit.

2.1.6 Transfer Terminal Building

The Odour Audit inspected the fixed metal plates retrofitted along the TTB breezeways in December 2013. All metal plates were found to be intact and in good condition around the TTB. All doors and roller shutters of the TTB were found to be shut at the time of the Odour Audit, reducing the likelihood of odour impacts detected off-site. The louvers on the end walls of the TTB were observed to be permanently shut.

2.1.7 Truck Entrance Plastic Strips

The truck entrance plastic strips of the TTB, used to reduce odour escaping through the opening, were found to be intact and in good condition (see **Photo 2.3**).

2.1.8 Smoke Testing

As per previous audits, smoke testing was carried out within the TTB to assist in determining the effectiveness of the forced air extraction system, as well as the extent to which the TTB has been sealed from leaks. As per previous audits, smoke was released from within the TTB at three points within the TTB. **Figure 2.1** shows the three points where the smoke was released within the TTB. **Photo 2.4** shows smoke testing at the truck entrance of the TTB, which reflects an additional test location to the normal smoke testing release points shown in **Figure 2.1**.

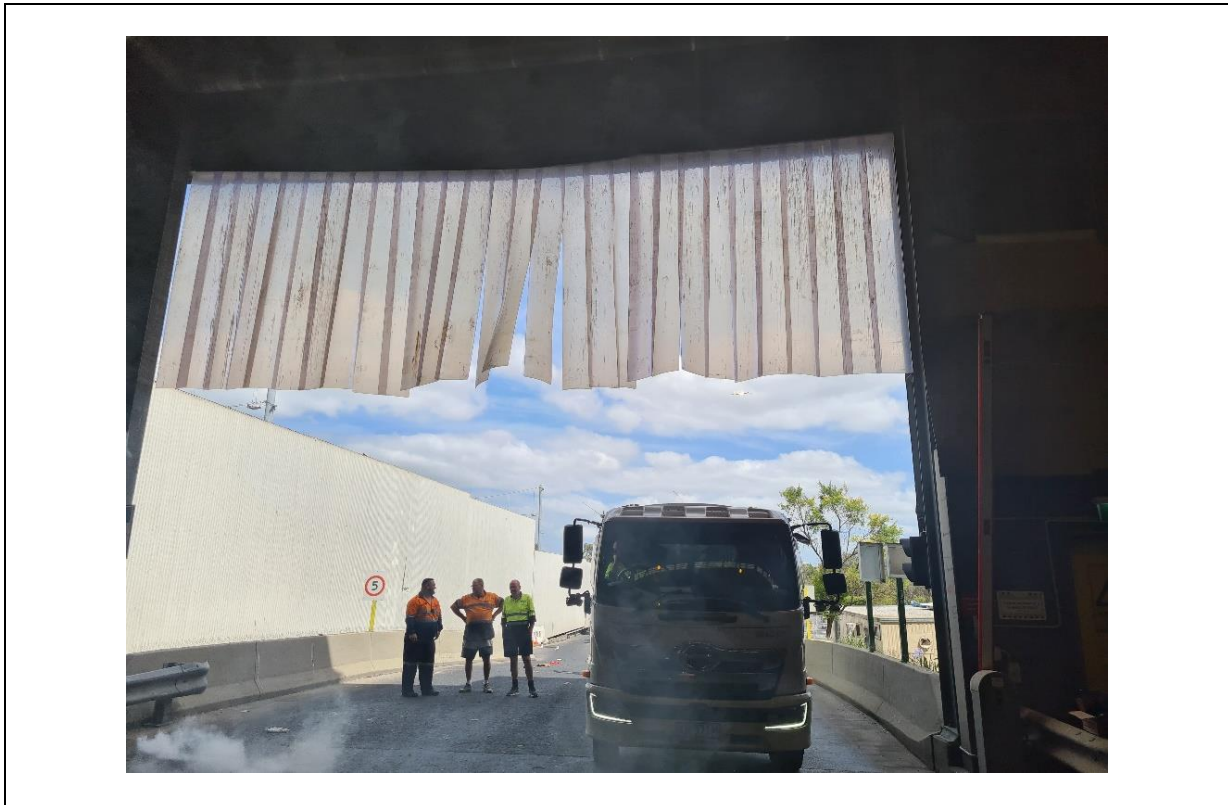


Photo 2.3 – A view of the truck entrance plastic strips as found on 19 November 2020



Photo 2.4 – A view of the truck entrance plastic strips during smoke testing on 19 November 2020

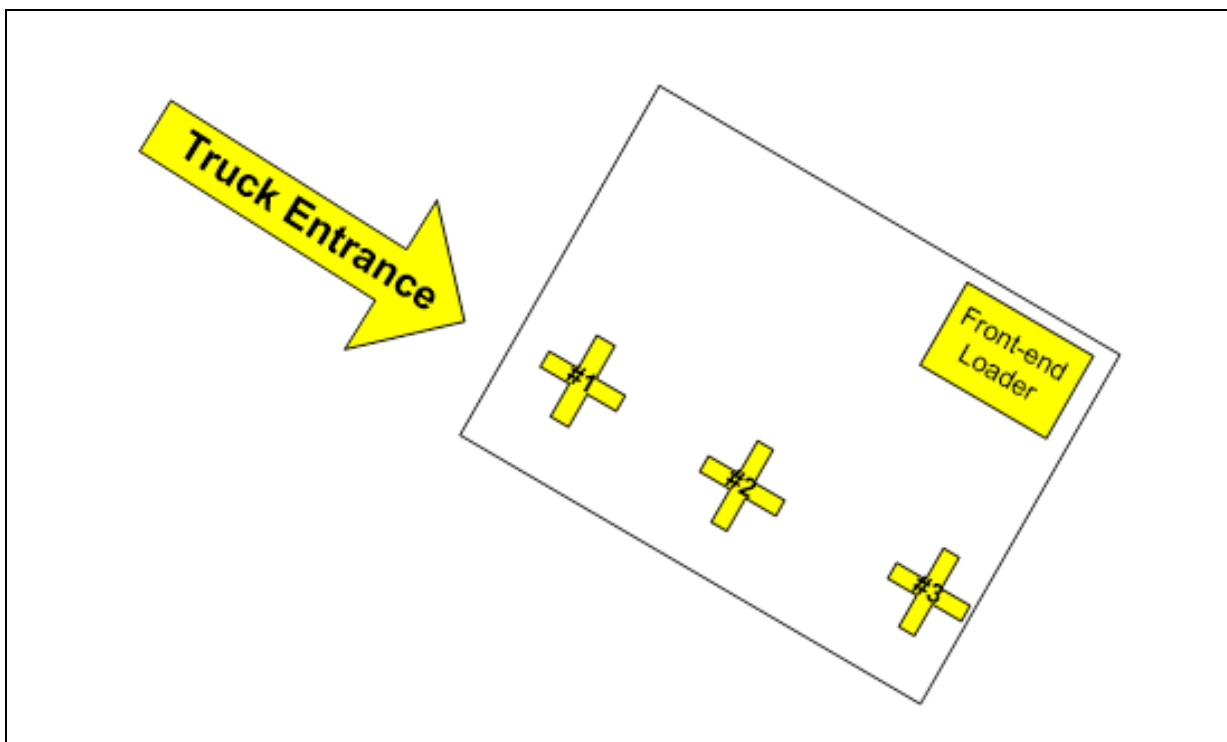


Figure 2.1 - Smoke testing release points within the TTB on 19 November 2020

2.1.8.1 Smoke Testing Results

Smoke Testing Point #1

The smoke released at this point initially rose gradually moving towards the truck entrance before rising to the roof and moving slowly towards the extraction system. Visible smoke extraction at the overhead capture points was evident during the smoke testing at this point. Any smoke that continued towards the truck entrance was drawn back into the building (see shown in **Photo 2.4**). During the previous odour audit of May 2020, it was observed that there was a slight bias in distribution at the overhead ventilation extraction louvre grilles closet to the truck entrance door compared with the other locations, suggesting an imbalance in the extraction system. This has since been rectified, with no similar observations made during the Odour Audit.

Smoke Testing Point #2

The smoke released at this point revealed a similar result to that documented for smoke testing point #1.

Smoke Testing Point #3

The smoke released at this point revealed a similar result to that documented for smoke testing point #1.

2.1.9 **Stormwater Retention Pond**

The stormwater retention pond during the Odour Audit visit was empty, as shown in **Photo 2.5**.



Photo 2.5 – Stormwater retention pond as seen on 19 November 2020

2.2 ODOUR COMPLAINTS HANDLING AND METEOROLOGICAL DATA

2.2.1 Odour Complaints Handling

As advised by Veolia personnel, there have been no complaints recorded in the Site's complaints register since March 2012.

2.2.2 Meteorological Data

The meteorological data provided to the Odour Audit, covering the period of between May 2020 and 19 November 2020, was inspected and found to be in good order. As found in previous Odour Audits, the observations were provided in daily 15-minute intervals and included all parameters necessary to develop a meteorological dataset for odour dispersion modelling.

As indicated via service records completed by Hydrometric Consulting Services (**HCS**) supplied by Veolia to the Odour Audit, the weather station continues to remain located in an accessible area with the solar panel and components regularly cleaned, and installation sprayed periodically for insects and trimming of nearby vegetation as required to ensure no overgrowth immediately around the weather station pole. Overall, HCS indicated that the weather stations were operating well, and any identified issues were rectified.

The weather data calibration and service reports by HCS are appended as **Appendix B**.

2.3 FIELD AMBIENT ODOUR ASSESSMENT METHODOLOGY

At present, no Australian Standard exists for field-based ambient odour assessment surveys. Consequently, TOU utilises a method for assessing the ground-level impacts of odour emissions using a modified version of the German Standard VDI 3940 (1993) – *‘Determination of Odorants in Ambient Air by Field Inspections’*.

Field-based ambient odour surveys are considered a valuable odour impact assessment tool as previous experience with ambient odour sampling and subsequent olfactometry testing suggests that accurate and useful ambient odour concentration data is difficult to obtain. Therefore, TOU has adopted a more practical approach based on the field measurement of odour intensity. With this method, calibrated and experienced odour specialists traverse the downwind surrounds of odour sources in a strategically mapped pattern, assessing the presence, character and intensity of any odours encountered and recording these observations along with wind speed and direction.

An ambient odour assessment was performed on 19 November 2020 between 1100 hrs and 1227 hrs. The FAOA survey was undertaken at strategic locations, both on-site and off-site. The ambient odour assessment focus was off-site, as required by the Conditions of Consent on “.....*nearby commercial and residential areas*.....” (Section 48 (f)). The TOU assessor firstly determined the wind direction using a Kestrel 4500 Pocket Weather Tracker Anemometer and then assessed locations of the TTB downwind.

The assessors spent approximately five minutes at each assessment location to gauge the effects of any odour impact. If an odour was detected at a location, the assessors attempted to characterise it. The general aim was to determine the extent of the impact of odours off-site and rank their intensity. The ranking scale for the German Standard VDI 3940 *‘Determination of Odorants in Ambient Air by Field Inspections’* was used for the intensity assessments. The standard’s ranking system is based on the following seven-point intensity scale, as shown in **Table 2.1** below.

Table 2.1 - VDI 3882 Odour Intensity Categories

Odour Strength	Intensity Rank (code)	TOU Interpretation (meaning)
Not detectable	0	No odour detected
Very weak	1	Odour detected but not strong enough to be characterised
Weak	2	Odour is weak but just able to be characterised
Distinct	3	Odour is distinct and easily characterised
Strong	4	Strong odour detectable
Very Strong	5	If offensive, the observer may consider moving from the area
Extremely Strong	6	Odour is sufficiently over-powering that assessor moves from the area

2.3.1 Field Ambient Odour Assessment - Results

The results of the FAOA survey conducted during the Odour Audit found that whilst intermittent odours were detected on-site, no odours were detectable off-site that could be linked back to the Site and its activities.

The field log sheets and visual survey plot are appended as **Appendix C**.

3 RECOMMENDATIONS/FOLLOW-UP ACTIONS

3.1 PREVIOUS AUDIT ACTIONS

The following list provides an outline of the last November 2020 odour audit actions and status as of the Odour Audit:

- **Previous Audit Action 1:** *Action 1 – All stack discharge velocity and airflow measurements collected during a service visit should be reported in future service logs.*

Status: Complete (see **Section 2.1.4.1** for more details).

- **Previous Audit Action 2:** *Action 2 - The odour extraction system to be checked, cleaned and balanced.*

Status: Complete (refer to **Section 2.1.4**).

- **Previous Audit Action 3 -** *Action 3 – Veolia to continue its review and update of the OMP for the Site.*

Status: On-going (refer to **Section 2.1.5**).

3.2 TRANSFER TERMINAL BUILDING

All metal plates were found to be intact and in good condition around the TTB. All doors and roller shutters of the TTB were found to be shut at the time of the Odour Audit, reducing the likelihood of odour impacts detected off-site. The louvres on the end walls of the TTB were observed to be permanently shut. Overall, the TTB was found to be well managed.

Based on the findings in the Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.3 COMPACTOR AREA

The general housekeeping around the compactor area was observed to be of high quality, with no evidence to suggest otherwise. As with previous Odour Audits, the container compacting/train packing area had a weak to distinct odour that was intermittently detectable but was found to be confined to this area only.

Based on the findings in this Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.4 ODOUR EXTRACTION SYSTEM

The service logs indicate that all required maintenance works on the odour extraction system since the previous November 2019 odour audit have been adequately undertaken, and the odour extraction system is operating in a satisfactory condition.

Based on the findings in the Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

3.5 WEATHER STATION

The dataset obtained from the weather station was found to be adequate. Moreover, the calibration and service reports from HCS indicate that all maintenance to the weather station and required calibrations were carried out as needed.

Based on the findings in the Odour Audit, the following action is recommended:

- **No further action is required at this stage.**

Field Ambient Odour Assessment Survey

The results of the FAOA survey conducted during the Odour Audit found that no odours were detectable off-site that could be linked back to the Site and its activities.

3.6 ODOUR MANAGEMENT PROCEDURES/PLAN

At the timing of the writing of the Odour Audit, the February 2010 OMP was last updated over seven years ago. Given the previous update, it is suggested that as part of good practice that Veolia reviews and update the February 2010 OMP to ensure it continues to reflect the odour management procedures implemented and followed at the Site. TOU was provided a copy of the Draft OEMP. Upon finalisation of the Draft OEMP and consolidation of all referenced documents, the Odour Audit will review this document in its entirety. Nevertheless, the annual review and commitment to continuous improvement to the operational and environmental management procedures and practices at the Site is endorsed by the Odour Audit.

Based on the findings in this Odour Audit, the following action/s is recommended:

- **Action 1 – Continue with the on-going review and commitment to continuous improvement of the Draft OEMP and referenced documents.**

3.7 CONCLUDING REMARK

Overall, this Odour Audit found that the operation and maintenance of the odour management system at the Site was satisfactory. There was no evidence to suggest that significant fugitive odour emission release from the Site is occurring.

The next Odour Audit is due in **May 2021**.



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXVI

Appendices

November 2020



APPENDIX A:

ODOUR EXTRACTION SYSTEM SERVICE REPORT (26 MAY 2020 – 26 OCTOBER 2020)



Jones, Rod <rod.jones@veolia.com>

Field Data Capture Notification - Triple M - NSW - Service Docket

1 message

no-reply@bsasendgrid.com.au <no-reply@bsasendgrid.com.au>

26 May 2020 at 11:47

To: service@triple-m.com.au, rod.jones@veolia.com
Cc: mrichards.b06w5c@zapiermail.com

SECURE

BSA | Maintain



Triple M - NSW - Service Docket

ID

239347

Time Start

Tue May 26 2020 11:44:01 GMT+1000 (AEST)

Client Details

CLYDE WASTE

Address

CLYDE WASTE 322 Parramatta Rd Clyde 2142

Site Contact Name

Ash Turner

Site Contact Telephone Number 2

02 8868 7401

Customer Ref Number

7100211700

Type of Service

Preventative Maintenance - PM

Job / Service Call Number

1278500

Fault Description

CLYDE WASTE - PM May L1 - MONTHLY

Asset List

EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1]

Job Safety Analysis Completed

YES

Description of Work Done

Carried out maintenance as scheduled on the extraction fans, checked belts and pulleys. Opened up all dampers and cleaned them. Dusted all cars and motors.

Parts, Materials?

No

Refrigerant Used?

No

Job Status

Completed

Technician's Signature

Client Signature

Signature Name

Rod Jones

Forwarding Email

rod.jones@veolia.com

Normal Hours

0

Time and a Half

0

Double Time

0

User ID

TMS-ZBN

Technician Name

ZACHARY JAMES BROWN

Ifoms Record ID

239347

Triple M - NSW - Service Docket

ID	239347
Record Location	Latitude:-33.837374, Longitude:151.021833, Altitude:8.211814, Speed:0.037203, Horizontal Accuracy:6.000906, Vertical Accuracy:3.000000, Time:05/26/2020 11:46:15 AEST
Total Hrs	0
Time Completed	2020-05-26 11:44:01

Job Safety Analysis

ID	S239347
Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1278500
Work to be done.	CLYDE WASTE - PM May L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Contact supervisor/manager if you have questions or concerns.	1
Engage specialists if required.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Ladder secured.	1
Barrier(s) installed around work area.	1
Extension ladders to be pitched a slope of 4:1, on a firm level surface.	1
Extension ladder to extend at least 1 metre over the landing.	1
Extension ladder to be tied or footed.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1

Job Safety Analysis

ID S239347

Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	No
Is it safe for you to proceed with your job.	Yes

Technician's Signature



PPE Title

Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipment, Safety Boots/Shoes


TMP Work Order No

Email Report

BSA Mobile Business Technologies, a Division of BSA Ltd


Triple M - NSW - Service Docket

Record: 240520

Time Start	Fri Jun 26 2020 15:01:41 GMT+1000 (AEST)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1283433
Fault Description	CLYDE WASTE - PM June L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance as scheduled on 2 exertion fans, dusted down all lights and vsds and check the belts and pullys on the motors
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Signature Name	Noone present in office to sign the docket
Forwarding Email	rod.jone@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Iforms Record ID	240520
Record Location	Latitude:-33.836014, Longitude:151.023234, Altitude:6.581985, Speed:0.825842, Horizontal Accuracy:48.000000, Vertical Accuracy:117.714798, Time:06/26/2020 15:14:07 AEST
Total Hrs	0
Time Completed	2020-06-26 15:01:41

Mobile Data Capture Report

Job Safety Analysis


Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1283433
Work to be done.	CLYDE WASTE - PM June L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	No
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All Isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Ladder secured.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1
Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	Yes
Sign in & out of your worksite.	1
Keep in regular contact with your supervisor/coordinator (arriving/leaving site).	1
Is it safe for you to proceed with your job.	Yes
Technician's Signature	
PPE Title	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipment, Safety Boots/Shoes
TMP Work Order No	

SECURE

BSA | Maintain

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think built

Triple M - NSW - Service Docket

ID	244789
Time Start	Fri Jul 24 2020 16:10:24 GMT+1000 (AEST)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1290406
Fault Description	CLYDE WASTE - PM July L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1]
Job Safety Analysis Completed	YES
Description of Work Done	Checked the belts and pullys on the extraction fans and cleaned off the dampers :
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Signature Name	Noone present
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Forms Record ID	244789
Record Location	Latitude:-33.837161, Longitude:151.021800, Altitude:7.973512, Speed:0.037652, Horizontal Accuracy:8.001208, Vertical Accuracy:3.000000, Time:07/24/2020 16:12:06 AEST
Total Hrs	0
Time Completed	2020-07-24 16:10:24

Job Safety Analysis

Job Safety Analysis

ID	S244789
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipmen Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Ladder secured.	1
Barrier(s) installed around work area.	1
Extension ladders to be pitched a slope of 4:1, on firm level surface.	1
Extension ladder to extend at least 1 metre over the landing.	1
Extension ladder to be tied or footed.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1
Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	Yes
Sign in & out of your worksite.	1
Keep in regular contact with your	



Job Safety Analysis

ID	S244789
PPE Title	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Electrical Test Equipmen Boots/Shoes
TMP Work Order No	

Email Report

BSA Mobile Business Technologies, a Division of BSA Ltd

BSA - NSW - TNSS Service Docket

ID	245842
Time Start	Wed Aug 26 2020 15:37:35 GMT+1000 (AEST)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1294745
Fe Description	CLYDE WASTE - PM August L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance on both extractor fans checking belts and pullys, cleaned out the motor fins for better cooling and cleaned out the pressure alarm sensors. Dusted down the lights for better lighting. Turned the fans back on and tested to make sure the alarm was working.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Ifoms Record ID	245842
Record Location	Latitude:-33.836946, Longitude:151.022155, Altitude:7.482498, Speed:0.006885, Horizontal Accuracy:16.002417, Vertical Accuracy:3.000000, Time:08/26/2020 15:40:23 AEST
Total Hrs	0
Time Completed	2020-08-26 15:37:35

Job Safety Analysis

ID	S245842
Are you an Apprentice?	Yes

Job Safety Analysis

S245842

Is this an Electrical task or are you using
Refrigerants?

No

Job/Service Call Number

1294745

Work to be done.

CLYDE WASTE - PM August L1 - MONTHLY

Protective Equipment to be Used During Works

Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes

Is there clear access to the work area equipment
& free from trips, slips & fall hazards?

Yes

Are weather conditions appropriate for the
commencement of works?

Yes

Is there a potential risk of disturbing asbestos
during the works you are undertaking today?

No

Does your task involve working on the roof?

No

Will your task involve Manual Handling?

Yes

Change the work process so that the loads do not
have to be lifted or moved by hand.

1

Use and maintain correct posture.

1

Minimize distance the load is to be moved/lifted.

1

Will your work impact general public/vehicle
control?

No

Does your task involve Electrical works?

No

Does your work involve Mechanical works?

No

Does your task involve working from heights (not
including roof work) & are there adequate fall
prevention controls in place?

No

Working from a step ladder?

Yes

Prior to use, ladder to be inspected.

1

Ladder secured.

1

Barrier(s) installed around work area.

1

Extension ladders to be pitched a slope of 4:1, on
a firm level surface.

1

Extension ladder to extend at least 1 metre over
the landing.

1

Extension ladder to be tied or footed.

1

Do not work on the top 3 rungs of a step or A
frame ladder.

1

Maintain 3 points of contact.

1

Electrical tools & equipment being used?

No

Will you be using chemicals during your task?

No

Will you be working in area's that produce
excessive noise?

No

Using HazMat?

No

Will you be welding or oxy cutting.

No

Will you be working in or near Cooling towers?

No

Handling refrigerant?

No

Are you working by yourself?

No

Is it safe for you to proceed with your job.

Yes

Technician's Signature



PPE Title



Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Face/Dust

SECURE

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BSA - NSW - TNSS Service Docket

ID	252535
Time Start	Fri Sep 25 2020 15:42:18 GMT+1000 (AEST)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1301602
Fault Description	CLYDE WASTE - PM September L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	<p>Attended site</p> <p>Was told the fan alarm had been going off</p> <p>Found extraction fan number 2 to be in alarm reset the alarm and ran the fan to test it. After running for over an hour no issues occurred. Belts and pulley in good order.</p>
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Rod Jones
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Iforms Record ID	252535
Record Location	<p>Latitude:-33.837376,</p> <p>Longitude:151.021969,</p> <p>Altitude:8.058791,</p> <p>Speed:0.295420,</p> <p>Horizontal Accuracy:32.004833,</p> <p>Vertical Accuracy:3.000000,</p> <p>Time:09/25/2020 15:46:51 AEST</p>
Total Hrs	0
Time Completed	2020-09-25 15:42:18

Job Safety Analysis

ID	S252535
Are you an Apprentice?	Yes

Job Safety Analysis

ID	S252535
Is this an Electrical task or are you using Refrigerants?	No
Job/Service Call Number	1301602
Work to be done.	CLYDE WASTE - PM September L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	Yes
All isolations complete: electrical, refrigeration, air, water, gas.	1
No work until all moving parts have stopped.	1
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Ladder secured.	1
Barrier(s) installed around work area.	1
Extension ladders to be pitched a slope of 4:1, on a firm level surface.	1
Extension ladder to extend at least 1 metre over the landing.	1
Extension ladder to be tied or footed.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1
Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	Yes
Sign in & out of your worksite.	1
Keep in regular contact with your supervisor/coordinator (arriving/leaving site).	1
Is it safe for you to proceed with your job.	Yes

Job Safety Analysis

ID

S252535

Technician's Signature



PPE Title

Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, High Visibility Garments, Electrical
Test Equipment, Safety Boots/Shoes

TMP Work Order No

Email Report



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BSA - NSW - TNSS Service Docket

ID	255293
Time Start	Mon Oct 26 2020 10:14:16 GMT+1100 (AEDT)
Client Details	CLYDE WASTE
Address	CLYDE WASTE 322 Parramatta Rd Clyde 2142
Site Contact Name	Ash Turner
Site Contact Telephone Number 2	02 8868 7401
Customer Ref Number	7100211700
Type of Service	Preventative Maintenance - PM
Job / Service Call Number	1312195
Fault Description	CLYDE WASTE - PM October L1 - MONTHLY
Asset List	EQUIP-M_Whole of Site - Mech_MONTHLY_Qty:1
Job Safety Analysis Completed	YES
Description of Work Done	Carried out maintenance on 2 extraction fans checking belts and cleaning out dampers and dusted off all lights.
Parts, Materials?	No
Refrigerant Used?	No
Job Status	Completed
Technician's Signature	
Client Signature	
Signature Name	Warren cassidy
Forwarding Email	rod.jones@veolia.com
Normal Hours	0
Time and a Half	0
Double Time	0
User ID	TMS-ZBN
Technician Name	ZACHARY JAMES BROWN
Forms Record ID	255293
Record Location	Latitude:-33.836420, Longitude:151.022722, Altitude:8.693104, Speed:-1.000000, Horizontal Accuracy:65.000000, Vertical Accuracy:10.000000, Time:10/26/2020 11:46:12 AEDT
Total Hrs	0
Time Completed	2020-10-26 10:14:16

Job Safety Analysis

ID	S255293
Are you an Apprentice?	Yes
Is this an Electrical task or are you using Refrigerants?	No

Job Safety Analysis

ID	S255293
Job/Service Call Number	1312195
Work to be done.	CLYDE WASTE - PM October L1 - MONTHLY
Protective Equipment to be Used During Works	Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes
Is there clear access to the work area equipment & free from trips, slips & fall hazards?	Yes
Are weather conditions appropriate for the commencement of works?	Yes
Is there a potential risk of disturbing asbestos during the works you are undertaking today?	No
Does your task involve working on the roof?	No
Will your task involve Manual Handling?	Yes
Change the work process so that the loads do not have to be lifted or moved by hand.	1
Use and maintain correct posture.	1
Minimize distance the load is to be moved/lifted.	1
Will your work impact general public/vehicle control?	No
Does your task involve Electrical works?	No
Does your work involve Mechanical works?	No
Does your task involve working from heights (not including roof work) & are there adequate fall prevention controls in place?	No
Working from a step ladder?	Yes
Prior to use, ladder to be inspected.	1
Ladder secured.	1
Barrier(s) installed around work area.	1
Extension ladders to be pitched a slope of 4:1, on a firm level surface.	1
Extension ladder to extend at least 1 metre over the landing.	1
Extension ladder to be tied or footed.	1
Do not work on the top 3 rungs of a step or A frame ladder.	1
Maintain 3 points of contact.	1
Electrical tools & equipment being used?	No
Will you be using chemicals during your task?	No
Will you be working in area's that produce excessive noise?	No
Using HazMat?	No
Will you be welding or oxy cutting.	No
Will you be working in or near Cooling towers?	No
Handling refrigerant?	No
Are you working by yourself?	Yes
Sign in & out of your worksite.	1
Keep in regular contact with your supervisor/coordinator (arriving/leaving site).	1
Is it safe for you to proceed with your job.	Yes

Technician's Signature



PPE Title

Gloves, Long Pants, Safety Glasses, Long Sleeve Shirt, Face/Dust mask, Electrical Test Equipment, Safety Boots/Shoes



Independent Air Flow Services

Accredited by the National Association of Testing Authorities No. 3098

A.B.N. 55 066 984 610

PO Box 4469, North Rocks NSW 2151

Telephone: 1300 004 237

Mobile: 0488 400 072

E-mail: independentairflow@optusnet.com

Web Address: www.independentairflow.com.au



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TEST REPORT

DATE: 25/06/2020

LOCATION: EAF 1 & 2 | Disposal Shed
Clyde Transport Terminal (Veolia) | 321 Parramatta Road, AUBURN NSW

CLIENT: Equilibrium Air Conditioning

ADDRESS: Unit 7, 38 Brookhollow Avenue
NORWEST NSW POST CODE: 2153

CONTACT: Steve Seretis PHONE NO: (02) 9439 4822

CERTIFICATE NO: SH325/20

Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed

EQUIPMENT	SERIAL NUMBERS	CALIBRATION DUE
Anemometer	T57251346003	May 2021
Manometer	19831	April 2021

TEST METHOD	TEST DESCRIPTION	REQUIREMENT	PAGE	RESULTS	PASS/FAIL
AS/NZS14644.3 (Clause B.4.3.3)	Supply Airflow Rate Calculate from Exhaust Face Velocity	N/A	Page 5	23 Air Changes Per Hour	RECORDED

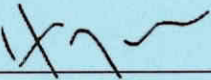
REMARKS AND RECOMMENDATIONS

Access to Exhaust Grilles Via Outside Stair Cases

Extraction Fan 1 & 2 Motor Make HG | Motor Frame Y315S

Tested By: D.Hazell

Recommended Next Test: June 2021

Checked/Accredited Signatory: 
D.Hazell

Date of Issue: 30/06/2020

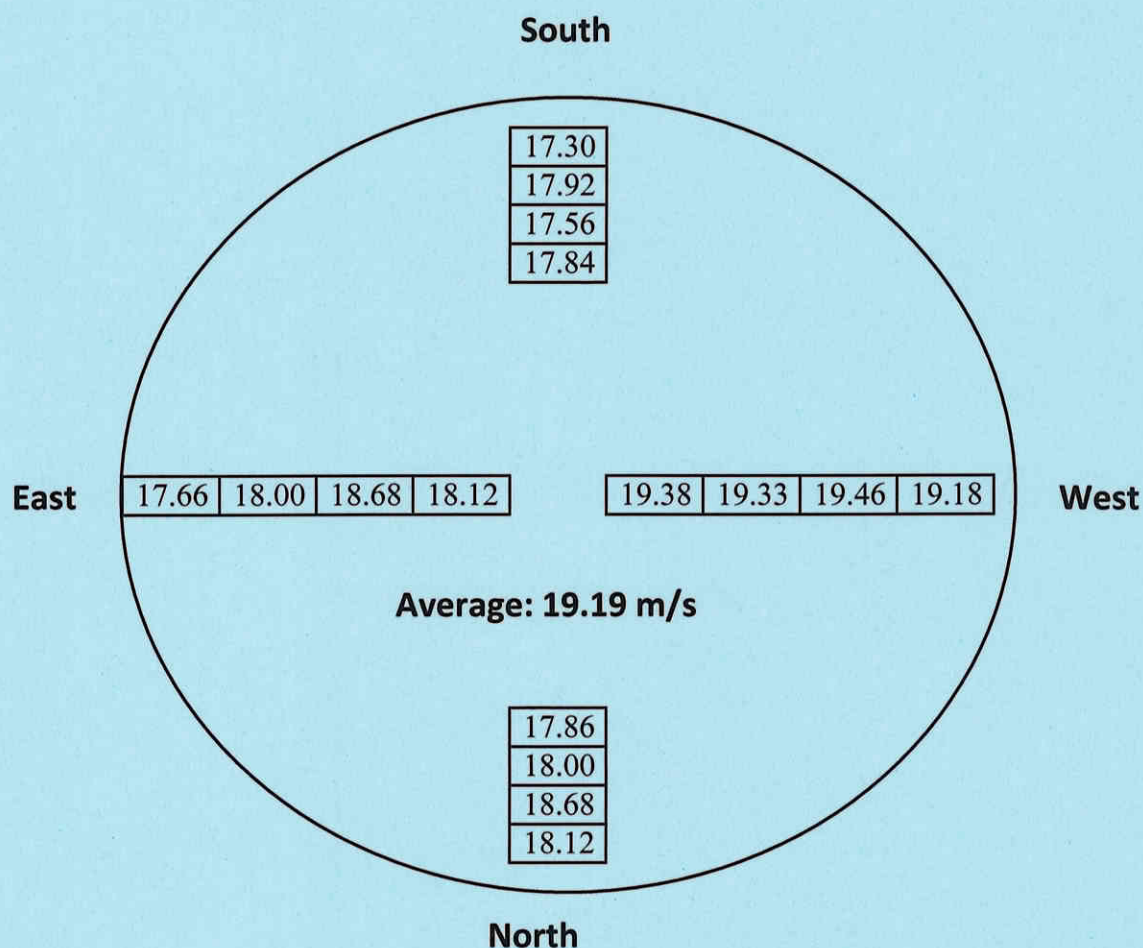
Clyde Transport Terminal (Veolia) Signatory _____

Certificate No: SH325/20

Clyde Transport Terminal (Veolia)

Exhaust Stack

AIR VELOCITY PROFILES



All readings in meter per second - m/s

Correction Factors (Already Applied)

>5.02	0.00
-------	------

*All Velocities recorded at a distance of aprox 150 mm from Exhaust Grille Face

Certificate No: SH325/20

Clyde Transport Terminal (Veolia)

Western Side | Exhaust Grilles

AIR VELOCITY PROFILES

Exhaust Grille 1

5.15	5.05	AVG: 4.86
4.51	4.74	

Exhaust Grille 2

4.92	5.40	AVG: 5.10
5.24	4.85	

Exhaust Grille 3

6.36	4.01	AVG: 5.37
6.16	4.96	

Exhaust Grille 4

3.43	4.42	AVG: 4.62
6.49	4.14	

Exhaust Grille 5

5.60	3.58	AVG: 3.75
2.48	3.35	

Exhaust Grille 6

10.22	5.98	AVG: 8.19
9.10	7.45	

Exhaust Grille 7

8.06	4.46	AVG: 7.07
9.38	6.38	

Exhaust Grille 8

8.82	8.00	AVG: 8.81
9.55	8.88	

All readings in meter per second - m/s

Correction Factors (Already Applied)

*All Velocities recorded at a distance of aprox 150 mm from Exhaust Grille Face

3.00	0.02
4.00	0.01
>5.02	0.00

Certificate No: SH325/20

Clyde Transport Terminal (Veolia)

Eastern Side | Exhaust Grilles

AIR VELOCITY PROFILES

Exhaust Grille 9

9.27	8.50	AVG: 8.38
7.99	7.77	

Exhaust Grille 10

9.36	8.14	AVG: 8.16
7.92	7.23	

Exhaust Grille 11

11.52	8.56	AVG: 10.17
10.26	10.34	

Exhaust Grille 12

11.34	9.78	AVG: 10.41
9.70	10.83	

Exhaust Grille 13

10.07	8.40	AVG: 9.56
10.37	9.41	

Exhaust Grille 14

7.65	7.34	AVG: 7.52
7.58	7.52	

Exhaust Grille 15

7.65	6.56	AVG: 7.43
8.07	7.45	

All readings in meter per second - m/s

Correction Factors (Already Applied)

>5.02	0.00
-------	------

*All Velocities recorded at a distance of aprox 150 mm from Exhaust Grille Face

Certificate No: SH325/20

Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed

Test Method: AS/NZS 14644.3 (Clause B.4.3.3) - Air Change Rate

TOTAL AIR QUANTITIES

Air Quantity is determined thus : Average Velocities x Face Area x 3.6×10^3

Filter	Face Area Calculation	Face Area m ²	Average Velocity m/s	Air Quantity m ³ /h
1	1.200 x 1.200	1.440	4.86	25194.24
2	1.200 x 1.200	1.440	5.20	26956.80
3	1.200 x 1.200	1.440	5.37	27838.08
4	1.200 x 1.200	1.440	4.62	23950.08
5	1.200 x 1.200	1.440	3.75	19440.00
6	1.200 x 1.200	1.440	8.19	42456.96
7	1.200 x 1.200	1.440	7.07	36650.88
8	1.200 x 1.200	1.440	8.81	45671.04
9	1.200 x 1.200	1.440	8.38	43441.92
10	1.200 x 1.200	1.440	8.16	42301.44
11	1.200 x 1.200	1.440	10.17	52721.28
12	1.200 x 1.200	1.440	10.41	53965.44
13	1.200 x 1.200	1.440	9.56	49559.04
14	1.200 x 1.200	1.440	7.52	38983.68
15	1.200 x 1.200	1.440	7.43	38517.12
Total Air Quantity				567648.00

AIR CHANGES PER HOUR

Air Changes per Hour = Air Quantity divide by Room Volume

Room	Air Quantity m ³ /h	Volume m ³	Air Changes Per Hour	*PASS / FAIL
Disposal Shed	567648.00	24558.00	23	RECORDED

*** Requirement:** Clyde Transport Terminal (Veolia) Set Recorded Air Changes Per Hour

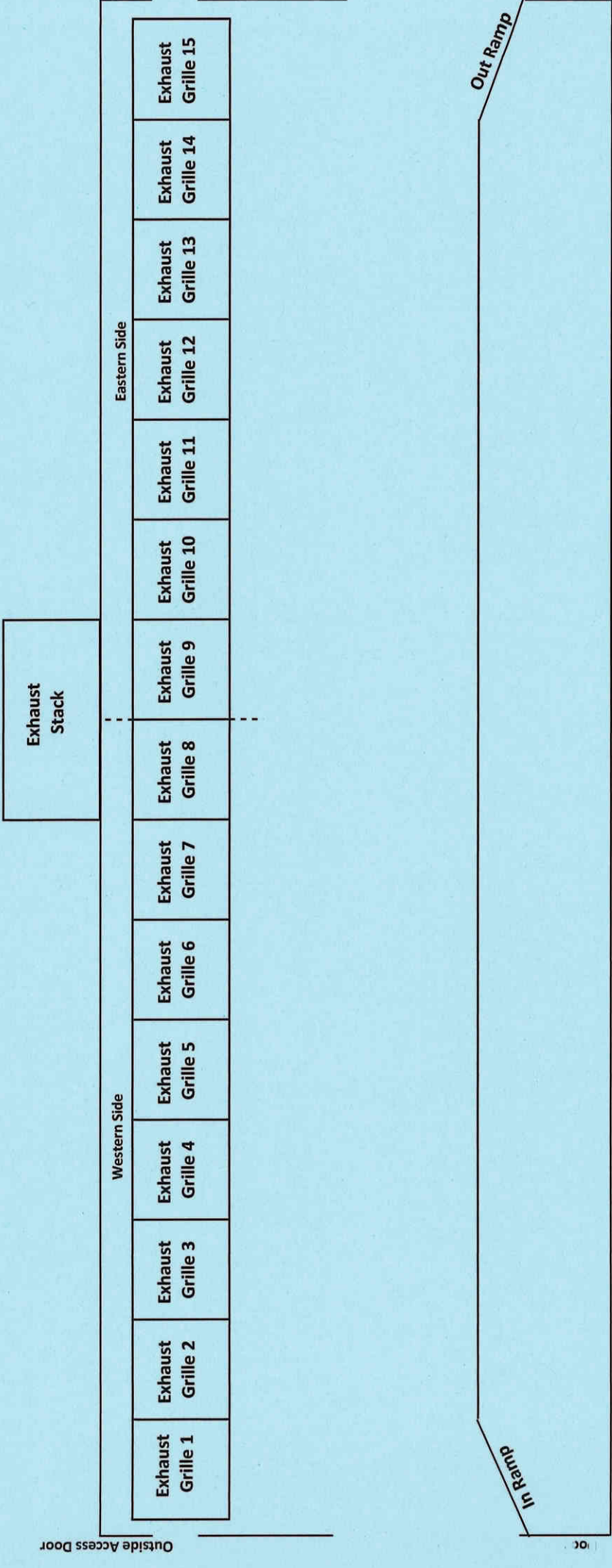
IF APPLICABLE ALL SCREENS REMOVED FOR FACE AREA CALCULATIONS

Face Area Calculation and Room Volume completed using Tape Measure Serial No: SH01

Certificate No: SH325/20

Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed





APPENDIX B:

WEATHER DATA CALIBRATION REPORTS (26 MAY 2020 – 19
NOVEMBER 2020)

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

25 May 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 21/05/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	14.6	14.4
2m*	14.6	14.6
Relative Humidity*	87	100
Wind Speed	0 m/s at ground	0 m/s at 10 metres
Wind Direction	100	100
Solar Radiation	40	41
TBRG	10mm	20 tips
Battery/Solar	13.2	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.
4. The relative humidity sensor is faulty and needs to be replaced.

Clyde 21/05/20

Sensor	Actual (field)	Logger
Temperature – 10m*	16.0	15.5
2m*	16.0	15.3
Relative Humidity*	84	85
Wind Speed	0 m/s at ground (poor exposure at ground)	0.95 m/s at 10 metres
Wind Direction	270	270
Solar Radiation	40	41
TBRG	No calibration	Raining
Battery/Solar	12.6	

* Note 1: Field reading is not inside the radiation shield.

Note 2: No Rain Gauge Calibration - raining

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.

A handwritten signature in black ink, appearing to read 'Glen Murphy'.

Glen Murphy

Hydrometric Consulting Services Pty Ltd

PO Box 3332

Putney NSW 2112

Mob 0402 134 092

Email glenmurf@ozemail.com.au

www.hydrometric.com.au

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

27 August 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 26/08/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

[Horsley Park 26/08/20](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	6.8	6.6
2m*	6.8	6.5
Relative Humidity*	78.1	80
Wind Speed	0.6 m/s at ground	0.8 m/s at 10 metres
Wind Direction	300	300
Solar Radiation	220	224
TBRG	10mm	21 tips
Battery/Solar	14.5	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.

[Clyde 26/08/20](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	11.9	11.1
2m*	11.9	11.3
Relative Humidity*	57	56.3
Wind Speed	0.8 m/s at ground (poor exposure at ground)	0.9 m/s at 10 metres
Wind Direction	270	269
Solar Radiation	520	535
TBRG	10mm	21 tips
Battery/Solar	12.6	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0900 EST as these were testing.

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.



Glen Murphy

Hydrometric Consulting Services Pty Ltd

PO Box 3332

Putney NSW 2112

Mob 0402 134 092

Email glenmurf@ozemail.com.au

www.hydrometric.com.au

Hydrometric Consulting Services Pty Ltd

ABN 16 091 437 071

17 November 2020

Mary Wong
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Mary,

As per our service agreement, on the 16/11/20 HCS undertook the service, calibration and maintenance of the weather stations located at the Horsley Park and Clyde sites. Field readings were obtained by a combination of a Kestral 3500, compass, Monitor Solar Radiation field unit and HS TBRG calibration device. Details are as follows:

Horsley Park 16/11/20

Sensor	Actual (field)	Logger
Temperature – 10m*	22.4	22
2m*	22.4	22.3
Relative Humidity*	67	67.8
Wind Speed	0.0 m/s at ground	0.3 m/s at 10 metres
Wind Direction	300	298
Solar Radiation	230	220
TBRG	10mm	19 tips
Battery/Solar	14.0	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 0800 EST as these were testing.

Additional Items

1. Solar panel and components cleaned. All components were very dirty.
2. Installation sprayed for insects.
3. Guy wires checked.

Clyde 16/11/20

Sensor	Actual (field)	Logger
Temperature – 10m*	32	31
2m*	32	31
Relative Humidity*	37	34
Wind Speed	0.7 m/s at ground (poor exposure at ground)	1.4 m/s at 10 metres
Wind Direction	80	80
Solar Radiation	1000	1100
TBRG	10mm	20 tips
Battery/Solar	13.0	

* Note 1: Field reading is not inside the radiation shield.

Note 2: Ignore rainfall tips logged at approximately 1020 EST as these were testing.

Additional Items

1. All components cleaned.
2. Installation sprayed for insects.
3. Hedge trimmed.

Both sites are now polled weekly by HCS and data is downloaded and available on the HCS website.

Should you require any further information on this report please do not hesitate to contact me on 0402 134 092.



Glen Murphy

Hydrometric Consulting Services Pty Ltd

PO Box 3332

Putney NSW 2112

Mob 0402 134 092

Email glenmurf@ozemail.com.au



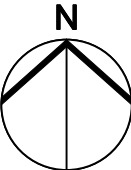
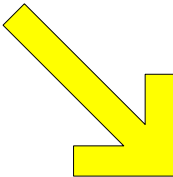
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APPENDIX C:

FIELD AMBIENT ODOUR ASSESSMENT PLOT AND FIELD SHEETS (19
NOVEMBER 2020)



DESCRIPTION Field Ambient Odour Assessment Survey Modified German Standard VDI 3940		LEGEND German Intensity Scale VDI3882 0 Not detectable 1 Very weak 2 Weak 3 Distinct 4 Strong 5 Very strong 6 Extremely strong		 Veolia (Australia) Pty Ltd Clyde Transfer Terminal, Clyde, NSW Field Ambient Odour Assessment Survey Survey Date: 19 November 2020 Survey Time Period: 1100 hrs to 1227 hrs		
	THE ODOUR UNIT PTY LTD Level 3, 12/56 Church Avenue MASCOT, NSW 2020 Phone: (02) 9209 4420 www.odourunit.com.au		DRAWN BY	J.SCHULZ 23/02/2021	<u>Odour Audit XXXVI</u> Field Ambient Odour Assessment Survey	<u>Plot No.</u> N1473-XXXVI
			CHECKED	M.ASSAL 23/02/2021		<u>Job No.</u> N1473L
			APPROVED	M.ASSAL 23/02/2021		
		Local wind direction 		Local wind conditions Light to moderate (0.5 m/s – 2 m/s), with winds blowing from the north-west. No rainfall observed. Refer to FAOA Logsheet N1473L-XXXVI for details on recorded odour detections		



THE ODOUR UNIT PTY LTD

Level 3, 12/56 Church Avenue
MASCOT NSW 2020

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Email: info@odourunit.com.au
Internet: www.odourunit.com.au
ABN: 53 091 165 061

Field Ambient Odour Assessment Log Sheet

Date: 19 November 2020

Assessor: J. Schulz

Weather Conditions: Light to moderate (0.5 m/s to 2 m/s) wind speeds blowing from the north-west. No rainfall observed.

Survey Reference Plot No: N1473L-XXXVI

GRIF REF. POSITION	MEASUREMENT TIME PERIOD (hrs)	WIND DIRECTION	WIND SPEED (m/s)	ODOUR PRESNT (Y/N)	ODOUR CHARACTER	VDI 3940 INTENSITY SCALE 0-6	COMMENTS
1	1100 – 1105	NW	0.5 – 1	N	--	0	--
2	1112 – 1117	NNW - WNW	0.5 – 2	N	--	0	--
3	1119 – 1124	NW	0.5 – 2	N	--	0	--
4	1140 – 1145	Calm	< 0.5	N	--	0	--
5	1148 – 1153	NW	0.5 – 2	N	--	0	--
6	1207 – 1212	NW	0.5 – 2	N	--	0	--
7	1214 – 1219	NW	0.5 – 2	N	--	0	--
8	1222 – 1227	NW	0.5 – 2	N	--	0	--

Appendix D3 - Noise Monitoring Data




Annual Truck Noise Measurements

*Clyde Transfer Terminal
October 2020*



Annual Truck Noise Measurements

Quality Information

Completed by:	 Mary Wong Graduate Environmental Engineer - Solid Waste Treatment
Reviewed by:	 Sara Maddison Operations Project Manager - Solid Waste Treatment
Authorised by:	 Rod Jones Facility Manager - Solid Waste Treatment

Address Veolia Australia & New Zealand
Corner Unwin and Shirley Streets, Rosehill, NSW, 2142

Date October 2020

Reference: CTT_TRUCK_1020

Status: **FINAL**

Rev No.	Details	Issued to	Date
0	Draft	Veolia (internal QA)	October 2020
1	Final	Veolia (internal QA)	October 2020

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Contents

Quality Information	3
Contents	5
Introduction	6
Noise Limit Criteria	7
Measurement Methodology	8
Noise Measurement Results	9
Discussion	10
Conclusions	11
References	12
Appendices	13
Appendix A - Truck Noise Monitoring Location	13
Appendix B - Sound Level Meter Calibration Certificate	14
Appendix C - Weighbridge Record	15
Appendix D - Truck Noise Measurement Field Sheets	16

List of Figures

Figure 1: Noise level distribution from Truck Noise Monitoring – 21 st of September 2020	9
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List of Tables

Table 1: L _{Amax} Noise Limits (dBA) – ADR 28/01	7
Table 2: NB class vehicle noise measurements	10

Introduction

The Clyde Transfer Terminal was issued with Conditions of Development Consent (Conditions) by the Department of Planning, Industry and Environment (DPIE) formerly known as the Department of Planning, which are attached to the Development Consent. The Conditions include a requirement to assess heavy vehicle noise limits specified in Australian Design Rule 28/01 (ADR 28/01).

The requirements of Condition 112 are as follows:

The Applicant shall implement a Heavy Vehicle Noise Monitoring Management Program for the development to the satisfaction of the Director-General. This program must:

- (a) monitor heavy vehicle noise on site, in accordance with the methods outlined in the “Truck Noise Monitoring – Proposed Test and Management Plan” prepared by Heggies and dated 26 May 2008;
- (b) be undertaken quarterly for a year starting in October 2008, and annually thereafter, unless otherwise agreed by the Director-General;
- (c) measure at least 25% of the heavy vehicles visiting the site;
- (d) identify heavy vehicles exceeding the relevant noise criteria specified in the Australian Design Rule 28/01, or its successor, and ensure that the owners of these subsequently comply with the relevant noise criteria;
- (e) report the number of non-compliant heavy vehicles identified and the actions undertaken to address these non-compliances in the Annual Environmental Monitoring Report; and
- (f) be amended, should the monitoring activities not achieve the aim of the program to the satisfaction of the Director-General.

This Annual Truck Noise Measurements report (the Report) presents the results of the fifteenth round of heavy vehicle noise monitoring at the Terminal. Monitoring was completed by Veolia on the 21st of September 2020 between 9:04 AM and 12:51 PM, in accordance with the Proposed Test Management Plan (PTMP) developed by Heggies. This is the eleventh sampling event and report prepared by Veolia under Condition 112 since assuming the responsibility of monitoring from Heggies.

Noise Limit Criteria

The noise limit criteria for maximum allowable noise levels for Goods Vehicles described in the PTMP (2008) are provided in Table 1 below.

Table 1: LMax Noise Limits (dBA) – ADR 28/01

Vehicle Category Code	Vehicle Type	Vehicles In Motion	Stationary Vehicles			
			Spark Ignition Engines Exhaust Outlet Height		Direct Injection Engines Exhaust Outlet Height	
			<1500mm	≤1500mm	<1500mm	≤1500mm
NA	Light Goods Vehicles GVM ≤3.5t on road use	78 to 80	89	85	99	95
NB	Medium Goods Vehicles GVM >3.5t ≤12t on road use	81 to 84	95	91	101	97
NC	Heavy Goods Vehicles GVM >12t on road use	81 to 87	95	91	103	99

Note: For vehicles in motion test, LMax noise limits are based on the Gross Vehicle Mass (GVM) and the Nett Engine Power (NEP). The noise limits in the table are expressed as a range where the lower noise level refers to the minimum GVM and NEP in each category and the upper noise level refers to the maximum GVM and NEP in each category.

Waste collection trucks entering the Terminal are loaded vehicles with a Gross Vehicle Mass (GVM) over 12 tonnes, based on tare weights of incoming vehicles on the site weighbridge. Hence, for the purpose of conducting a vehicle noise assessment at the Terminal, Vehicle Category Code “NC”, for heavy goods vehicles with a GVM of 12 tonnes or more on the road, a Net Engine Power (NEP) of greater than 150 kilowatts (kW) has been applied. The upper limit (87dBA) of the NC range provided in Table 1 will be used to assess truck noise measurements. This is consistent with the assessment criteria applied by Heggies in previous monitoring rounds.

Measurement Methodology

The monitoring location from which the truck noise was measured was consistent with previous monitoring rounds conducted by Veolia and Heggies. Measurements were taken at a distance of 7.5 metres from the centre of the vehicle travel path and a height of 1.2 metres above the vehicle entrance ramp from the weighbridge to the Terminal building, which was the test site surface. Trucks accelerating at this location, which is shown in Appendix A, were measured where the vehicle was accelerating in line with the microphone of the sound level meter. For further information regarding measurement location and methodology refer to the PTMP prepared by Heggies (Heggies, 2008).

Measurements were taken with a TSI Quest SoundPro Series SE/DL Sound Level Meter, using an A-weighted (LA) filter network and fast response time constant as required under ADR 28/01. The (LA) filter ensured that the sound level meter was less sensitive to very high and very low frequencies which would be outside the range of noise emitted by the heavy vehicles entering and exiting the Terminal, while the fast response time constant enabled a more accurate reading of noise from each vehicle movement. Calibration of the Sound Level Meter was completed by AirMet Scientific prior to monitoring. The calibration certificate is included in Appendix B.

For each truck movement a LA maximum noise level measurement was recorded. Additional information on each truck movement was noted (where possible) to assist in identification of trucks exceeding noise criteria, including:

- Company;
- Vehicle Make and Type;
- Registration; and
- Exhaust Location.

The collected data was cross referenced with the Terminal's weighbridge records for vehicles entering the facility on 21 September 2020, a copy of which is provided in Appendix C, to identify trucks measured during this sampling period and to calculate the percentage of trucks sampled.

Noise Measurement Results

A total of 119 truck movements were recorded entering the Terminal and a measurement for each vehicle movement past the monitoring location was taken as the trucks accelerated on the entrance ramp.

Thirty-nine (39) of these measurements were under impeded traffic conditions causing distorted noise emissions, caused by queuing of waste trucks waiting to enter the Terminal building during busy periods or idling of engines past the testing zone. Impeded traffic conditions affected the representative quality of the noise measurements. The measured sound levels of each pass-by event were recorded on field sheets, which have been tabulated in Appendix D.

A total measurement of 40.07% of all truck movements (297) was achieved during this monitoring round, which satisfies the minimum requirements of Condition 112 (25% of daily truck movements). Figure 1 presents the distribution of recorded sound level frequencies which were measured in A-weighted decibels (dBA).

Measurements of 'normal' truck acceleration ranged from 64dBA to 84dBA with the highest frequency occurring between 76dBA to 80dBA. Impaired acceleration readings due to the impeded traffic conditions ranged from 65dBA to 78dBA, with the highest frequency occurring 72dBA. Impaired acceleration readings were plotted separately from the normal accelerating vehicles on Figure 1.

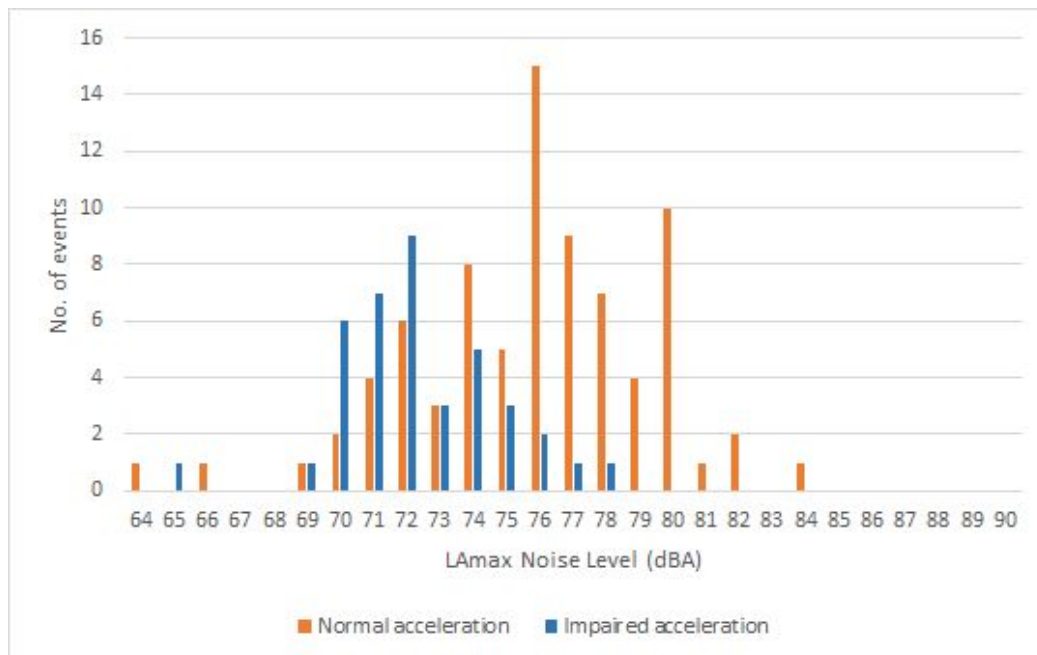


Figure 1: Noise level distribution from Truck Noise Monitoring – 21st of September 2020

Discussion

Comparison of the heavy vehicle noise measurement results against the limits specified in ADR 28/01 (refer to Table 1) indicates that all trucks entering the Terminal in this monitoring round were within the acceptable noise criteria for the NC category vehicles (<87dBA).

Three smaller waste vehicles (ranging from approximately 6 – 11 tonnes when loaded) were observed entering the facility during this monitoring event. For the purpose of this assessment it is considered that these vehicles would fall within the NB category with a noise limit of 84dBA. All noise emitted from vehicles assigned to this category was measured below this threshold as indicated in Table 3.

Table 2: NB class vehicle noise measurements

Time	Company	Make	Registration	L _A Max (dBA)	Impeded Movement
9:19	Sydney Waste Pty Ltd	Mitsubishi	XN71FD	75	Y
10:24	Sydney Waste Pty Ltd	Mitsubishi	XN71FD	66	N
11:36	Sydney Waste Pty Ltd	Mitsubishi	XN71FD	70.7	Y

Noise from the Terminal's operations such as plant noise (forklift, compactor, front end loader and road sweeper) and surrounding areas (Parramatta Road, train tracks) were not significant enough to influence waste truck noise measurements at this location. The noise wall located adjacent to the exit ramp, on the North-western boundary of the Terminal, also assisted in focusing noise measurements on truck movements into the facility by limiting interference noise sources.

No noise complaints pertaining to the Terminal's operations were received between the annual truck noise monitoring rounds. This indicates that noise impacts from waste truck movements at the Terminal boundary are within the Terminal and surrounding area background noise levels.

Conclusions

Truck noise monitoring was conducted on the 21st of September 2020 between 9:04 AM and 12:51 PM. The results indicated:

- Noise from 119 truck movements was measured;
- A total of 40.07% of truck movements were measured, which satisfies the minimum 25% requirement of Condition 112;
- All measured trucks were identified against weighbridge records to verify the accuracy of field data for reporting.
- All truck noise measurements were within the noise criteria of ADR 28/01 and hence did not exceed the trigger limits.
- Noise from the Terminal's operations was not significant enough to influence the truck noise assessment.
- No noise complaints pertaining to the Terminal's operations were received since the previous truck noise monitoring round.
- Truck noise impacts at the Terminal boundary are considered to be within background levels.

References

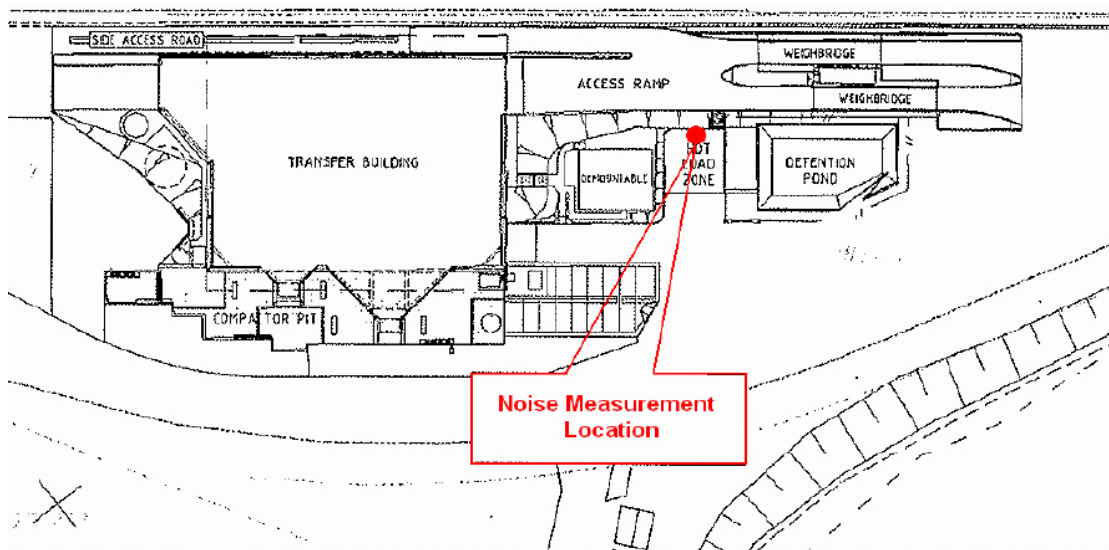
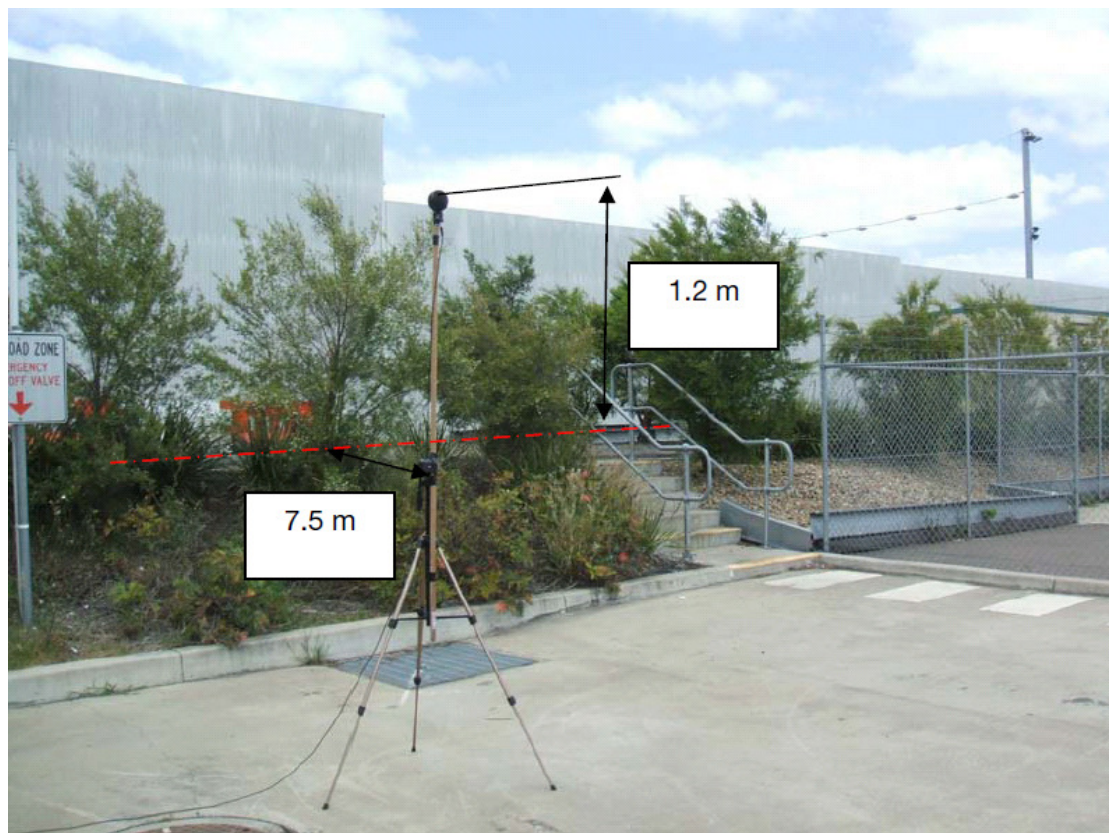
- ADR 28/01 Vehicle Standard Australian Design Rule 28/01 – External Noise of Motor Vehicles), 2006. Federal Register of Legislative Instruments F2006L01279. Australian Government.
- PTMP (2008) Clyde Waste Transfer Facility – Truck Noise Monitoring Proposed Test and Management Plan, 2008. Heggies Pty Ltd.

Appendices

Appendix A - Truck Noise Monitoring Location



Truck Noise Monitoring Location



Appendix B - Sound Level Meter Calibration Certificate

Sound Level Meter

Instrument **Sound Pro**
Serial No. **BLJ090019**



17/09/2020

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Battery Holder	✓	
	Alkaline Battery	✓	
	Cover	✓	
	Output	✓	
Switch/Keypad	Operation	✓	
Display	Intensity	✓	
	Operation	✓	
Microphone	Type	✓	
	Socket	✓	
	Plug	✓	
PCB	Condition	✓	
Calibrator	Condition	✓	
	Battery Holder	✓	
	IVAC Output	✓	
	Frequency	✓	
A Weighting	Operation	✓	
C Weighting	Operation	✓	
Software	Version		
Datalogger	Operation	✓	
Download	Operation	✓	
Other Tests			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Frequency	dB	Volts AC	Calibration Equipment	Instrument Reading	
				Before	After
1Khz	114dB	1 Vac	QC10 QIK100071	114.0 dB	114.0dB

Calibrated by: Lauren Tompkins

Calibration date: 17/09/2020

Next calibration due: 16/03/2021

Appendix C - Weighbridge Record

Facility	Date	Time In	Rego No	Customer name
Clyde	21-09-20	0:03	BL63SB	Enfield Bulk
Clyde	21-09-20	0:19	XN15OI	External Bulk - No Jobs Available
Clyde	21-09-20	0:41	BIN796	Bingo Recycling Pty Ltd
Clyde	21-09-20	0:52	CQ07CK	Veolia Newcastle Frontlift
Clyde	21-09-20	1:13	XN92TT	Enfield FrontLift
Clyde	21-09-20	1:37	BIN849	Bingo Recycling Pty Ltd
Clyde	21-09-20	1:37	BL63SB	Enfield Bulk
Clyde	21-09-20	1:44	CJ07WC	Enfield FrontLift
Clyde	21-09-20	1:54	XN61FN	Enfield FrontLift
Clyde	21-09-20	1:54	CK24KZ	Enfield FrontLift
Clyde	21-09-20	2:14	BIN655	Bingo Recycling Pty Ltd
Clyde	21-09-20	2:21	CL78JV	Enfield RearLift
Clyde	21-09-20	2:27	XN42CY	Enfield RearLift
Clyde	21-09-20	2:27	CN73MI	Ku-ring-gai Council
Clyde	21-09-20	2:30	CO74NR	Cleanaway Pty Ltd
Clyde	21-09-20	2:37	XN60GV	Enfield Bulk
Clyde	21-09-20	2:39	CN76MI	Ku-ring-gai Council
Clyde	21-09-20	2:51	CN79MI	Ku-ring-gai Council
Clyde	21-09-20	3:17	BJB386	Enfield Bulk
Clyde	21-09-20	3:19	URM444	URM Environmental Services Pty Limi
Clyde	21-09-20	3:45	CA55PN	Watty's Waste Services Pty Limited
Clyde	21-09-20	3:46	URM818	Cumberland Council - Auburn
Clyde	21-09-20	4:08	XN15BC	Enfield FrontLift
Clyde	21-09-20	4:19	CN73MI	Ku-ring-gai Council
Clyde	21-09-20	4:22	URM832	Cumberland Council - Auburn
Clyde	21-09-20	4:22	XN39HQ	Canterbury-Bankstown Council
Clyde	21-09-20	4:22	CN76MI	Ku-ring-gai Council
Clyde	21-09-20	4:27	URM817	Cumberland Council - Auburn
Clyde	21-09-20	4:34	BJB386	Enfield Bulk
Clyde	21-09-20	4:35	URM835	Cumberland Council - Auburn
Clyde	21-09-20	4:37	XN55MA	Cleanaway Pty Ltd
Clyde	21-09-20	4:42	XN60GV	Enfield Bulk
Clyde	21-09-20	4:46	XN54QT	Burwood Council - Trade Waste Servi
Clyde	21-09-20	4:51	URM678	Cumberland Council - Auburn
Clyde	21-09-20	4:53	CN79MI	Ku-ring-gai Council
Clyde	21-09-20	4:55	XN10OA	Enfield FrontLift
Clyde	21-09-20	4:58	XQ91AE	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	4:59	CE28CW	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	5:16	CP75SH	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	5:18	XN92TT	Enfield FrontLift
Clyde	21-09-20	5:22	AR11AM	Cleanaway Pty Ltd
Clyde	21-09-20	5:34	XN26NX	Enfield FrontLift
Clyde	21-09-20	5:37	CK24KZ	Enfield FrontLift
Clyde	21-09-20	5:42	CC18DN	Canterbury-Bankstown Council
Clyde	21-09-20	5:45	XN57NE	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	5:47	BA87SF	Cleanaway Pty Ltd

Clyde	21-09-20	5:51	XN74KN	Cleanaway Pty Ltd
Clyde	21-09-20	5:58	BH77MA	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	6:07	XN75OS	Sydney Waste Pty Ltd
Clyde	21-09-20	6:11	CH89NS	Canterbury-Bankstown Council
Clyde	21-09-20	6:16	CP80RB	Canterbury-Bankstown Council
Clyde	21-09-20	6:20	CB46UN	City of Ryde
Clyde	21-09-20	6:20	XN72BC	Canterbury-Bankstown Council
Clyde	21-09-20	6:23	XN23JX	Canterbury-Bankstown Council
Clyde	21-09-20	6:24	CK10EJ	Enfield RearLift
Clyde	21-09-20	6:31	XN15KU	Canterbury-Bankstown Council
Clyde	21-09-20	6:31	CP02AT	Canterbury-Bankstown Council
Clyde	21-09-20	6:33	URM804	Cumberland Council - Auburn
Clyde	21-09-20	6:41	CH53RO	Canterbury-Bankstown Council
Clyde	21-09-20	6:41	XN44ML	Canterbury-Bankstown Council
Clyde	21-09-20	6:45	CJ07WC	Enfield FrontLift
Clyde	21-09-20	6:46	URM842	Cumberland Council - Auburn
Clyde	21-09-20	6:46	CM88RN	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	6:49	BQ60WN	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	6:49	CB10ZY	Canterbury-Bankstown Council
Clyde	21-09-20	6:52	XN78SF	Enfield FrontLift
Clyde	21-09-20	6:58	XQ93AE	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	6:58	URM827	Cumberland Council - Auburn
Clyde	21-09-20	6:59	CP03AT	Canterbury-Bankstown Council
Clyde	21-09-20	7:07	CM18AV	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	7:10	CK29XA	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	7:17	XN00KT	Hornsby Council
Clyde	21-09-20	7:21	URM848	Cumberland Council - Auburn
Clyde	21-09-20	7:27	CO65GZ	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	7:29	URM814	Cumberland Council - Auburn
Clyde	21-09-20	7:32	BI82JD	Hunter's Hill Council
Clyde	21-09-20	7:42	XN85HS	City of Ryde
Clyde	21-09-20	7:48	XN69NL	Cleanaway Pty Ltd
Clyde	21-09-20	7:54	XN74KN	Cleanaway Pty Ltd
Clyde	21-09-20	7:56	CN65YN	City of Ryde
Clyde	21-09-20	7:57	AQ16ZR	Cleanaway Pty Ltd
Clyde	21-09-20	7:57	CD31ZM	Cleanaway Pty Ltd
Clyde	21-09-20	8:04	BB78PU	Burwood Council
Clyde	21-09-20	8:06	BZ93HN	City of Ryde
Clyde	21-09-20	8:06	URM321	Hunter's Hill Council
Clyde	21-09-20	8:07	CE98GR	City of Ryde
Clyde	21-09-20	8:12	XN10HU	Sydney Waste Pty Ltd
Clyde	21-09-20	8:15	URM845	Cumberland Council - Auburn
Clyde	21-09-20	8:15	OZI042	Aussie Skips Commercial Pty Ltd
Clyde	21-09-20	8:17	CK52AL	Canterbury-Bankstown Council
Clyde	21-09-20	8:17	BP01LI	Canterbury-Bankstown Council
Clyde	21-09-20	8:23	CL64YL	City of Ryde
Clyde	21-09-20	8:25	URM805	Cumberland Council - Auburn
Clyde	21-09-20	8:26	YRT604	Viking Waste Services Pty Ltd
Clyde	21-09-20	8:28	CP19KQ	Ku-ring-gai Council

Clyde	21-09-20	8:29	XQ83GB	Burwood Council
Clyde	21-09-20	8:30	AA11RS	Ku-ring-gai Council
Clyde	21-09-20	8:30	XQ82GB	Burwood Council
Clyde	21-09-20	8:31	CD26PG	City of Ryde
Clyde	21-09-20	8:33	CK29AL	Ashfield Council
Clyde	21-09-20	8:34	XN57NE	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	8:35	CP61YV	Strathfield Municipal Council
Clyde	21-09-20	8:42	XN72BC	Canterbury-Bankstown Council
Clyde	21-09-20	8:45	CN73MI	Ku-ring-gai Council
Clyde	21-09-20	8:45	CN79MI	Ku-ring-gai Council
Clyde	21-09-20	8:49	BN56QO	Canterbury-Bankstown Council
Clyde	21-09-20	8:54	BN29GB	Canterbury-Bankstown Council
Clyde	21-09-20	8:54	XN26KZ	Enfield RearLift
Clyde	21-09-20	8:55	CK41CQ	Cumberland Council - Auburn
Clyde	21-09-20	8:58	URM059	Hunter's Hill Council
Clyde	21-09-20	8:59	XN00UC	City of Canada Bay Council - Domestic
Clyde	21-09-20	9:02	URM814	Cumberland Council - Auburn
Clyde	21-09-20	9:03	XN61LR	Fairfield City Council - Waste
Clyde	21-09-20	9:04	CK27AL	Ashfield Council
Clyde	21-09-20	9:05	XN78LI	Fairfield City Council - Waste
Clyde	21-09-20	9:08	CN76MI	Ku-ring-gai Council
Clyde	21-09-20	9:08	CN92MI	Ku-ring-gai Council
Clyde	21-09-20	9:08	CF44UC	Enfield RearLift
Clyde	21-09-20	9:10	XN09GD	Earthpower Technologies Sydney Pty.
Clyde	21-09-20	9:10	XN70LJ	Hornsby Council
Clyde	21-09-20	9:12	CD85SC	City of Ryde
Clyde	21-09-20	9:13	XN26RU	Enfield RearLift
Clyde	21-09-20	9:16	CE57RY	City of Canada Bay Council - Domestic
Clyde	21-09-20	9:16	URM842	Cumberland Council - Auburn
Clyde	21-09-20	9:17	BA44NN	City of Ryde
Clyde	21-09-20	9:18	URM804	Cumberland Council - Auburn
Clyde	21-09-20	9:19	CP80RB	Canterbury-Bankstown Council
Clyde	21-09-20	9:19	XN71FD	Sydney Waste Pty Ltd
Clyde	21-09-20	9:20	CM72SQ	Ku-ring-gai Council
Clyde	21-09-20	9:21	CH89NS	Canterbury-Bankstown Council
Clyde	21-09-20	9:22	BP02LI	Canterbury-Bankstown Council
Clyde	21-09-20	9:24	2URM	URM Environmental Services Pty Limi
Clyde	21-09-20	9:27	CB46UN	City of Ryde
Clyde	21-09-20	9:27	CE65RY	City of Canada Bay Council - Domestic
Clyde	21-09-20	9:28	XN68LJ	Hornsby Council
Clyde	21-09-20	9:30	BN73GB	Canterbury-Bankstown Council
Clyde	21-09-20	9:30	XN44ML	Canterbury-Bankstown Council
Clyde	21-09-20	9:32	BL54KN	Leichhardt Municipal Council
Clyde	21-09-20	9:32	CE28CW	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	9:34	XN23JX	Canterbury-Bankstown Council
Clyde	21-09-20	9:34	CL43KU	Enfield RearLift

Clyde	21-09-20	9:37	URM827	Cumberland Council - Auburn
Clyde	21-09-20	9:39	CC18DN	Canterbury-Bankstown Council
Clyde	21-09-20	9:44	CA25MI	Ashfield Council
Clyde	21-09-20	9:47	CO11WZ	Hornsby Council
Clyde	21-09-20	9:49	XN09GD	Earthpower Technologies Sydney Pty.
Clyde	21-09-20	9:53	CN98LG	Ku-ring-gai Council
Clyde	21-09-20	9:54	XN23KQ	Sydney Waste Pty Ltd
Clyde	21-09-20	9:54	CP02AT	Canterbury-Bankstown Council
Clyde	21-09-20	9:55	XN15KU	Canterbury-Bankstown Council
Clyde	21-09-20	9:56	CK34SQ	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	9:56	XN71GJ	URM Environmental Services Pty Limi
Clyde	21-09-20	9:59	XN15BC	Enfield FrontLift
Clyde	21-09-20	10:05	CQ49QR	Enfield RearLift
Clyde	21-09-20	10:06	CM73SQ	Ku-ring-gai Council
Clyde	21-09-20	10:09	CK21QL	Hornsby Council
Clyde	21-09-20	10:09	XN16KT	Hornsby Council
Clyde	21-09-20	10:22	CK68TO	Ku-ring-gai Council
Clyde	21-09-20	10:23	CE98GR	City of Ryde
Clyde	21-09-20	10:24	CB10ZY	Canterbury-Bankstown Council
Clyde	21-09-20	10:24	XN71FD	Sydney Waste Pty Ltd
Clyde	21-09-20	10:28	CP03AT	Canterbury-Bankstown Council
Clyde	21-09-20	10:31	CP61YV	Strathfield Municipal Council
Clyde	21-09-20	10:33	CP03VX	Hornsby Council - Litter Bin Collec
Clyde	21-09-20	10:37	CH53RO	Canterbury-Bankstown Council
Clyde	21-09-20	10:38	XN25GD	Sydney Waste Pty Ltd
Clyde	21-09-20	10:39	URM848	Cumberland Council - Auburn
Clyde	21-09-20	10:40	CN99LG	Ku-ring-gai Council
Clyde	21-09-20	10:43	BV96PW	Fairfield City Council - Waste
Clyde	21-09-20	10:50	XN90LJ	Hornsby Council
Clyde	21-09-20	10:54	CQ64LO	Sydney Waste Pty Ltd
Clyde	21-09-20	11:00	CBB804	Sydney Waste Pty Ltd
Clyde	21-09-20	11:03	XN83EV	Cumberland Council - Auburn
Clyde	21-09-20	11:08	CM18AV	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	11:10	AP70YU	Hornsby Council
Clyde	21-09-20	11:11	XN72MK	Sydney Waste Pty Ltd
Clyde	21-09-20	11:12	XN13KR	Sydney Waste Pty Ltd
Clyde	21-09-20	11:13	CL19PZ	External Bulk - No Jobs Available
Clyde	21-09-20	11:14	CE28GN	Cumberland Council - Auburn
Clyde	21-09-20	11:16	XN72LJ	Hornsby Council
Clyde	21-09-20	11:19	CI16WF	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	11:19	XN19IN	Sydney Waste Pty Ltd
Clyde	21-09-20	11:20	XN27RU	Enfield FrontLift
Clyde	21-09-20	11:21	BH77MA	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	11:21	CP70DL	Strathfield Municipal Council
Clyde	21-09-20	11:21	XN60GO	Enfield FrontLift
Clyde	21-09-20	11:22	CK54KT	Enfield RearLift
Clyde	21-09-20	11:24	CM88RN	JJ Richards & Sons Pty Ltd

Clyde	21-09-20	11:24	CB46UN	City of Ryde
Clyde	21-09-20	11:24	BL63SB	Enfield Bulk
Clyde	21-09-20	11:25	URM915	URM Environmental Services Pty Limi
Clyde	21-09-20	11:27	URM842	Cumberland Council - Auburn
Clyde	21-09-20	11:28	CK10EJ	Enfield RearLift
Clyde	21-09-20	11:29	URM811	Cumberland Council - Auburn
Clyde	21-09-20	11:30	BT52CL	External Bulk - No Jobs Available
Clyde	21-09-20	11:31	CF65GX	Cumberland Council - Auburn
Clyde	21-09-20	11:32	CE72ZF	City of Canada Bay Council - Domestic
Clyde	21-09-20	11:36	XN71FD	Sydney Waste Pty Ltd
Clyde	21-09-20	11:38	CF33PN	City of Canada Bay Council - Domestic
Clyde	21-09-20	11:40	XN26NX	Enfield FrontLift
Clyde	21-09-20	11:42	CL78JV	External Bulk - No Jobs Available
Clyde	21-09-20	11:43	XN06OJ	Sydney Waste Pty Ltd
Clyde	21-09-20	11:43	URM846	Cumberland Council - Auburn
Clyde	21-09-20	11:44	CE65RY	City of Canada Bay Council - Domestic
Clyde	21-09-20	11:45	CF71JM	Sydney Waste Pty Ltd
Clyde	21-09-20	11:46	CL02TB	Sydney Waste Pty Ltd
Clyde	21-09-20	11:53	URM827	Cumberland Council - Auburn
Clyde	21-09-20	11:55	CL98LU	Sydney Waste Pty Ltd
Clyde	21-09-20	12:01	TAD859	Hornsby Council
Clyde	21-09-20	12:02	CD26PG	City of Ryde
Clyde	21-09-20	12:04	BN56QO	Canterbury-Bankstown Council
Clyde	21-09-20	12:04	CL42KU	Enfield RearLift
Clyde	21-09-20	12:10	CP61YV	Strathfield Municipal Council
Clyde	21-09-20	12:12	CK24KZ	Enfield FrontLift
Clyde	21-09-20	12:12	XN02KT	Hornsby Council
Clyde	21-09-20	12:16	BZ93HN	City of Ryde
Clyde	21-09-20	12:16	CM75VP	URM Environmental Services Pty Limi
Clyde	21-09-20	12:18	URM814	Cumberland Council - Auburn
Clyde	21-09-20	12:19	1URM	URM Environmental Services Pty Limi
Clyde	21-09-20	12:19	CE98GR	City of Ryde
Clyde	21-09-20	12:20	URM845	Cumberland Council - Auburn
Clyde	21-09-20	12:29	CK52AL	Canterbury-Bankstown Council
Clyde	21-09-20	12:30	XN34EB	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	12:33	CL64YL	City of Ryde
Clyde	21-09-20	12:33	BA44NN	City of Ryde
Clyde	21-09-20	12:33	CD85SC	City of Ryde
Clyde	21-09-20	12:36	CO11WZ	Hornsby Council
Clyde	21-09-20	12:41	CI15WC	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	12:45	XN07KT	Hornsby Council
Clyde	21-09-20	12:47	XN00KT	Hornsby Council
Clyde	21-09-20	12:47	BN29GB	Canterbury-Bankstown Council
Clyde	21-09-20	12:51	BP01LI	Canterbury-Bankstown Council

Clyde	21-09-20	13:11	URM816	Cumberland Council - Auburn
Clyde	21-09-20	13:12	CK29XA	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	13:15	CK27AL	Ashfield Council
Clyde	21-09-20	13:18	CJ07WC	Enfield FrontLift
Clyde	21-09-20	13:18	AO24JO	Enfield FrontLift
Clyde	21-09-20	13:36	CK68TO	Ku-ring-gai Council
Clyde	21-09-20	13:39	CK29AL	Ashfield Council
Clyde	21-09-20	13:41	CM72SQ	Ku-ring-gai Council
Clyde	21-09-20	13:42	CM73SQ	Ku-ring-gai Council
Clyde	21-09-20	13:44	BN73GB	Canterbury-Bankstown Council
Clyde	21-09-20	13:55	XN00UC	City of Canada Bay Council - Domestic
Clyde	21-09-20	13:58	BP02LI	Canterbury-Bankstown Council
Clyde	21-09-20	14:08	XN36SS	JJ Richards & Sons Pty Ltd
Clyde	21-09-20	14:10	CN98LG	Ku-ring-gai Council
Clyde	21-09-20	14:13	CE57RY	City of Canada Bay Council - Domestic
Clyde	21-09-20	14:20	XN90LJ	Hornsby Council
Clyde	21-09-20	14:20	XN68LJ	Hornsby Council
Clyde	21-09-20	14:20	CK21QL	Hornsby Council
Clyde	21-09-20	14:21	XN70LJ	Hornsby Council
Clyde	21-09-20	14:22	URM806	Cumberland Council - Auburn
Clyde	21-09-20	14:22	XN16KT	Hornsby Council
Clyde	21-09-20	14:29	XN78SF	Enfield FrontLift
Clyde	21-09-20	14:35	CN99LG	Ku-ring-gai Council
Clyde	21-09-20	14:39	BN29GB	Canterbury-Bankstown Council
Clyde	21-09-20	14:41	BN56QO	Canterbury-Bankstown Council
Clyde	21-09-20	14:48	XN96LU	Enfield Bulk
Clyde	21-09-20	14:49	XN10OA	Enfield FrontLift
Clyde	21-09-20	15:17	XN27RU	Enfield FrontLift
Clyde	21-09-20	15:17	CJ07WC	Enfield FrontLift
Clyde	21-09-20	15:29	AP70YU	Hornsby Council
Clyde	21-09-20	15:54	BV22EK	Enfield Bulk
Clyde	21-09-20	15:54	4HOOKN	Enfield Bulk
Clyde	21-09-20	15:57	XN96LU	Enfield Bulk
Clyde	21-09-20	16:13	XN26RU	Enfield RearLift
Clyde	21-09-20	16:35	XN83AX	Enfield FrontLift
Clyde	21-09-20	16:39	XN49CY	Enfield RearLift
Clyde	21-09-20	17:05	XN27RU	Enfield FrontLift
Clyde	21-09-20	17:32	BJB386	External Bulk - No Jobs Available
Clyde	21-09-20	18:44	XN27RU	Enfield FrontLift
Clyde	21-09-20	18:46	XN96LU	Enfield Bulk
Clyde	21-09-20	19:35	BL63SB	Enfield Bulk
Clyde	21-09-20	19:38	XN55UV	Leichhardt Municipal Council
Clyde	21-09-20	19:44	CL91UL	Cleanaway Pty Ltd
Clyde	21-09-20	19:46	CO13WQ	Remondis Australia Pty Ltd
Clyde	21-09-20	19:49	CI27XY	Leichhardt Municipal Council
Clyde	21-09-20	19:57	XN96LU	Enfield Bulk
Clyde	21-09-20	20:20	BJB386	External Bulk - No Jobs Available

Clyde	21-09-20	20:38	BL63SB	Enfield Bulk
Clyde	21-09-20	20:41	CL91UL	Cleanaway Pty Ltd
Clyde	21-09-20	20:54	CA51HK	Leichhardt Municipal Council
Clyde	21-09-20	20:56	XN42CY	Enfield RearLift
Clyde	21-09-20	20:58	XN96LU	External Bulk - No Jobs Available
Clyde	21-09-20	21:17	BL63SB	Enfield Bulk
Clyde	21-09-20	21:24	CG60MB	Cleanaway Pty Ltd
Clyde	21-09-20	21:28	AM42VY	Waste Clear Pty Ltd
Clyde	21-09-20	21:37	CK24KZ	Enfield FrontLift
Clyde	21-09-20	21:55	XN96LU	External Bulk - No Jobs Available
Clyde	21-09-20	22:12	BL63SB	Enfield Bulk
Clyde	21-09-20	22:15	XN61FN	Enfield FrontLift
Clyde	21-09-20	22:19	BV22EK	Enfield Bulk
Clyde	21-09-20	22:23	CJ07WC	Enfield FrontLift
Clyde	21-09-20	22:47	XN83AX	Enfield FrontLift
Clyde	21-09-20	23:21	XN49CY	Enfield RearLift
Clyde	21-09-20	23:28	XN96LU	External Bulk - No Jobs Available
Clyde	21-09-20	23:41	CL02TB	Sydney Waste Pty Ltd

Appendix D - Truck Noise Measurement Field Sheets

Noise Level Measurement Results

Time	Company	Make	Lift type	Rego No	Exhaust location	La Max (dBA)	Impeded Movement (Y/N)	Comments
9:04	Ashfield Council	IVECO	Rear	CK27AL	Front left	76.2	Y	
9:05	Fairfield City Council - Waste	ISUZU	Rear	XN78LI	Side	72.8	Y	
9:08	Ku-ring-gai Council	MITSUBISHI	Rear	CN76MI		69.2	N	
9:08	Ku-ring-gai Council	MITSUBISHI	Rear	CN92MI		64.9	N	
9:08	Enfield RearLift	ISUZU	Rear	CF44UC		70.4	N	
9:10	Earthpower Technologies Sydney Pty.	ISUZU		XN09GD	Left side	72.8	N	
9:10	Hornsby Council	IVECO	Side	XN70LJ	Front middle	71.6	Y	
9:12	City of Ryde	BUCHER	Rear	CD85SC	Side	72.9	Y	
9:13	Enfield RearLift	ISUZU	Rear	XN26RU		72.6	Y	
9:16	City of Canada Bay Council - Domest	IVECO	Rear	CE57RY		76.8	Y	
9:16	Cumberland Council - Auburn	HINO	Side	URM842	Front right	72.3	Y	
9:17	City of Ryde	IVECO	Rear	BA44NN	Front right	76.8	N	
9:18	Cumberland Council - Auburn		Rear	URM804	Front right	80.5	N	
9:19	Canterbury-Bankstown Council	IVECO	Rear	CP80RB	Front right	79	N	
9:19	Sydney Waste Pty Ltd	MITSUBISHI	Rear	XN71FD	Front left	75	Y	Small truck
9:20	Ku-ring-gai Council	IVECO	Side	CM72SQ	Front right	74.5	N	
9:21	Canterbury-Bankstown Council		Side	CH89NS	Front right	76	N	
9:22	Canterbury-Bankstown Council		Rear	BP02LI		74.4	Y	
9:24	URM Environmental Services Pty Limi	ACCO	Front	2URM	Left side	72.4	Y	
9:27	City of Ryde	ISUZU	Rear	CB46UN	Right side	77.4	N	
9:27	City of Canada Bay Council - Domest	IVECO	Side	CE65RY	Front right	82.3	N	
9:28	Hornsby Council	IVECO	Side	XN68LJ	Front right	74	Y	
9:30	Canterbury-Bankstown Council		Side	BN73GB		78.6	N	
9:30	Canterbury-Bankstown Council	IVECO	Rear	XN44ML	Front middle	74.5	N	
9:32	Leichhardt Municipal Council	HINO	Rear	BL54KN		73.8	N	
9:32	JJ Richards & Sons Pty Ltd	DENNIS	Rear	CE28CW		75.6	Y	
9:34	Canterbury-Bankstown Council	IVECO	Side	XN23JX	Front right	74.1	Y	
9:34	Enfield RearLift	ISUZU	Rear	CL43KU		71.4	Y	

9:37	Cumberland Council - Auburn	IVECO	Rear	URM827	Front right	78.3	N	
9:39	Canterbury-Bankstown Council	IVECO	Side	CC18DN	Front right	75.7	N	
9:44	Ashfield Council	ISUZU	Rear	CA25MI		72.4	N	
9:47	Hornsby Council	HINO	Rear	CO11WZ		74.8	N	
9:49	Earthpower Technologies Sydney Pty.	ISUZU		XN09GD	Left side	76	N	
9:53	Ku-ring-gai Council	IVECO	Side	CN98LG	Front right	80.1	N	
9:54	Sydney Waste Pty Ltd		Rear	XN23KQ	Front right	78.7	N	
9:54	Canterbury-Bankstown Council		Side	CP02AT	Front right	76	N	
9:55	Canterbury-Bankstown Council		Side	XN15KU		78.3	Y	
9:56	JJ Richards & Sons Pty Ltd	DENNIS	Rear	CK34SQ	Side	73	N	
9:56	URM Environmental Services Pty Limi		Rear	XN71GJ		70.5	Y	
9:59	Enfield FrontLift		Front	XN15BC		72.2	N	
10:05	Enfield RearLift	ISUZU	Rear	CQ49QR		71.2	N	
10:06	Ku-ring-gai Council	IVECO	Side	CM73SQ	Front right	77.4	N	
10:09	Hornsby Council		Side	CK21QL	Front right	80.3	N	
10:09	Hornsby Council	IVECO	Side	XN16KT	Front right	77.1	N	
10:22	Ku-ring-gai Council	IVECO	Side	CK68TO	Front right	78.9	N	
10:23	City of Ryde	DENNIS	Rear	CE98GR	Side	81.1	N	
10:24	Canterbury-Bankstown Council	IVECO	Side	CB10ZY	Front right	80.7	N	
10:24	Sydney Waste Pty Ltd	MITSUBISHI	Rear	XN71FD	Front left	66	N	Small truck
10:28	Canterbury-Bankstown Council		Side	CP03AT	Front right	79	N	
10:31	Strathfield Municipal Council	HINO	Rear	CP61YV		75.8	N	
10:33	Hornsby Council - Litter Bin Collec		Rear	CP03VX	Back left	77.7	N	
10:37	Canterbury-Bankstown Council		Side	CH53RO	Front right	76.6	N	
10:38	Sydney Waste Pty Ltd	ISUZU	Front	XN25GD	Side	76.5	N	
10:39	Cumberland Council - Auburn	IVECO	Side	URM848	Front right	76.9	N	
10:40	Ku-ring-gai Council	IVECO	Side	CN99LG	Front right	78.4	N	
10:43	Fairfield City Council - Waste	IVECO	Rear	BV96PW	Front right	76	N	
10:50	Hornsby Council	IVECO	Side	XN90LJ	Front right	76.3	N	
10:54	Sydney Waste Pty Ltd	FUSO	Rear	CQ64LO	Side	71	N	
11:00	Sydney Waste Pty Ltd		Rear	CBB804	Front right	76.3	N	
11:03	Cumberland Council - Auburn		Rear	XN83EV		74.4	N	
11:08	JJ Richards & Sons Pty Ltd		Rear	CM18AV	Side	79	N	

11:10	Hornsby Council	IVECO	Rear	AP70YU	Front right	79.1	N	
11:11	Sydney Waste Pty Ltd	IVECO	Rear	XN72MK	Front right	78.9	N	
11:12	Sydney Waste Pty Ltd	IVECO	Rear	XN13KR	Front right	74.5	N	
11:13	External Bulk - No Jobs Available	ISUZU	Rear	CL19PZ	Side	75.5	N	
11:14	Cumberland Council - Auburn	IVECO	Rear	CE28GN	Front right	74.2	N	
11:16	Hornsby Council	IVECO	Side	XN72LJ	Front right	78.9	N	
11:19	JJ Richards & Sons Pty Ltd	HINO	Rear	CI16WF		80.8	N	
11:19	Sydney Waste Pty Ltd	ISUZU	Rear	XN19IN		72.7	N	
11:20	Enfield FrontLift		Front	XN27RU		76.1	N	
11:21	JJ Richards & Sons Pty Ltd		Front	BH77MA	Side	76.8	N	
11:21	Strathfield Municipal Council	BUCHER	Side	CP70DL	Side	70.9	Y	
11:21	Enfield FrontLift		Front	XN60GO		72.7	Y	
11:22	Enfield RearLift		Rear	CK54KT	Side	69.2	Y	
11:24	JJ Richards & Sons Pty Ltd		Rear	CM88RN	Rear	71.1	Y	
11:24	City of Ryde		Rear	CB46UN	Right side	70.3	Y	
11:24	Enfield Bulk	VOLVO		BL63SB	Side	71	Y	
11:25	URM Environmental Services Pty Limi	HINO	Rear	URM915	Front right	70.8	Y	
11:27	Cumberland Council - Auburn	HINO	Side	URM842	Front right	73.6	Y	
11:28	Enfield RearLift	ISUZU	Rear	CK10EJ	Side	70.3	Y	
11:29	Cumberland Council - Auburn	ISUZU	Side	URM811	Front right	71.8	Y	
11:30	External Bulk - No Jobs Available	MERCEDES	Rear	BT52CL	Front right	71.8	Y	
11:31	Cumberland Council - Auburn	ISUZU	Rear	CF65GX	Side	65.1	Y	
11:32	City of Canada Bay Council - Domest	DENNIS	Rear	CE72ZF	Side	74.1	Y	
11:36	Sydney Waste Pty Ltd	MITSUBISHI	Rear	XN71FD	Front left	70.7	Y	Small truck
11:38	City of Canada Bay Council - Domest	DENNIS	Rear	CF33PN	Side	74.8	Y	
11:40	Enfield FrontLift	VOLVO	Front	XN26NX	Rear	72.8	Y	
11:42	External Bulk - No Jobs Available	ISUZU	Rear	CL78JV	Rear	71.6	Y	
11:43	Sydney Waste Pty Ltd	IVECO	Rear	XN06OJ	Front right	73.4	N	
11:43	Cumberland Council - Auburn	IVECO	Side	URM846	Front right	73	Y	
11:44	City of Canada Bay Council - Domest	ACCO	Side	CE65RY	Front right	72.9	Y	
11:45	Sydney Waste Pty Ltd	ACCO	Rear	CF71JM	Front right	75.8	Y	
11:46	Sydney Waste Pty Ltd	IVECO	Rear	CL02TB	Front left	73.3	Y	
11:53	Cumberland Council - Auburn	IVECO	Rear	URM827	Front right	82.8	N	

11:55	Sydney Waste Pty Ltd	IVECO	Rear	CL98LU	Front right	71.2	N	
12:01	Hornsby Council	IVECO	Rear	TAD859	Front left	74.9	N	
12:02	City of Ryde	IVECO	Side	CD26PG	Front left	80	N	
12:04	Canterbury-Bankstown Council	DENNIS	Side	BN56QO	Side	77.5	N	
12:04	Enfield RearLift	ISUZU	Rear	CL42KU		70	N	
12:10	Strathfield Municipal Council	HINO	Rear	CP61YV		71.3	N	
12:12	Enfield FrontLift		Front	CK24KZ		74.2	N	
12:12	Hornsby Council	IVECO	Rear	XN02KT	Front left	72.7	N	
12:16	City of Ryde	IVECO	Side	BZ93HN	Front left	77.2	N	
12:16	URM Environmental Services Pty Limi	ISUZU	Rear	CM75VP		72.7	N	
12:18	Cumberland Council - Auburn	IVECO	Side	URM814	Front left	76.9	N	
12:19	URM Environmental Services Pty Limi	ACCO	Front	1URM	Front right	84.9	N	
12:19	City of Ryde	BUCHER	Rear	CE98GR	Side	77.3	N	
12:20	Cumberland Council - Auburn	IVECO	Side	URM845	Side	77	Y	
12:29	Canterbury-Bankstown Council	IVECO	Rear	CK52AL	Front left	80.2	N	
12:30	JJ Richards & Sons Pty Ltd	MERCEDES	Rear	XN34EB	Front left	75.6	N	
12:33	City of Ryde	IVECO	Side	CL64YL	Front left	80.1	N	
12:33	City of Ryde	IVECO	Rear	BA44NN	Front right	80.2	N	
12:33	City of Ryde	BUCHER	Rear	CD85SC	Side	72.1	Y	
12:36	Hornsby Council	HINO	Rear	CO11WZ		75.3	N	
12:41	JJ Richards & Sons Pty Ltd	IVECO	Front	CI15WC	Front middle	77.4	N	
12:45	Hornsby Council	IVECO	Side	XN07KT	Front left	76.7	N	
12:47	Hornsby Council	IVECO	Rear	XN00KT	Front left	80.1	N	
12:47	Canterbury-Bankstown Council	DENNIS	Side	BN29GB	Side	77.2	N	
12:51	Canterbury-Bankstown Council	IVECO	Rear	BP01LI	Front left	76.1	N	

Measured Truck Movements

119

Total Impeded Truck Movements

39

Total Truck Movements (21/09/2020)

297

Unimpeded Measurement

80

Percent of truck movements measured

40.07%

Total Small Truck Measurements

3

Appendix D4 - Pest & Vermin Reports

SERVICE REPORT

23/01/2020

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
Clyde Transfer Terminal
322 Parramatta Road
AUBURN NSW 2144

Service Details:

A quarterly routine pest control service to internal
and external areas for cockroaches, ants, spiders
and rodents.

Inspected and treated all internal areas of the shed,
pit area and external area by using Roban rodent
bait and Cislin 25 spray.

Inspected and treated staff rooms, toilets and kitchen
areas by using Goliath cockroach gel and Coopex dust
spot spray.

Light rodent activity found in shed area and treated
by using Roban rodent bait.

SERVICE REPORT

15/04/2020

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
Clyde Transfer Terminal
322 Parramatta Road
AUBURN NSW 2144

Service Details:

A quarterly routine pest control service to internal and external areas for cockroaches, ants, spiders and rodents.

Inspected and treated all internal areas of the shed, pit area and external area by using Roban rodent bait and Cislin 25 spray.

Inspected and treated staff rooms, toilets and kitchen areas by using Goliath cockroach gel and Coopex dust spot spray.

Rodent activity found in pit area and external areas treated by using Roban rodent bait.

SERVICE REPORT

3/07/2020

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
Clyde Transfer Terminal
322 Parramatta Road
AUBURN NSW 2144

Service Details:

A quarterly routine pest control service to internal and external areas for cockroaches, ants, spiders and rodents.

Inspected and treated all internal areas of the shed, pit area and external area by using Roban rodent bait and Cislin 25 spray.

Inspected and treated staff rooms, toilets and kitchen areas by using Goliath cockroach gel and Coopex dust spot spray.

SERVICE REPORT

15/10/2020

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
Clyde Transfer Terminal
322 Parramatta Road
AUBURN NSW 2144

Service Details:

A quarterly routine pest control service to internal and external areas for cockroaches, ants, spiders and rodents.

Inspected and treated all internal areas of the shed, pit area and external area by using Roban rodent bait and Cislin 25 spray.

Inspected and treated office area, toilets and internal areas by using Goliath cockroach gel and Coopex dust spot spray.

Rodent activity found at external area shed area and treated by using Roban rodent bait.