



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXX

Final Report

December 2022

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Project Number: N1473L

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Initial Draft Report	23.01.2023	Pending documentation from Client
Draft Report	14.03.2023	Draft report issued to the Client
Final Report	14.03.2023	Final report issued to the Client
Report Preparation		
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Report Title: Veolia (Australia) Pty Ltd Clyde Waste Transfer Terminal – Odour Audit XXXX		

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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 XXXX covering the six months between 8 June 2022 and 21 December 2022
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 fortieth (**XXXX**) Odour Audit at the Clyde Transfer Terminal (the **Site**). The visit was undertaken on 21 December 2022 and is part of an on-going six-monthly odour audit surveillance program that has been completed since the commissioning of the forced air extraction system at the Site.

1.1 ODOUR AUDIT PERIOD

Odour Audit XXXX covers the period between 8 June 2022 and 21 December 2022 (the **Odour Audit**).

1.2 ODOUR AUDIT REQUIREMENTS

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

“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 XXXX 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

At the time of the Odour Audit visit, the prevailing weather conditions were light to moderate (2.0 – 4.0 metres per second (**m/s**)) wind speeds with the local wind direction blowing predominantly from the southeast. The skies were clear and the ambient temperature during the Odour Audit visit was between 17 and 21 degrees Celsius (**°C**) during the Odour Audit visit. 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 140 tonnes of waste on the floor. This tonnage is 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. The 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 21 December 2022 (during a smoke test)

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 (refer to **Appendix B** for FAOA 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 maintained to a 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 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 21 December 2022 is shown in **Photo 2.2**.



Photo 2.2 – A view of the container area as found on 21 December 2022

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 June 2022 to December 2022.

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, component replacement, 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.

2.1.5 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 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 superficially damaged and in a state to function and effectively reduce air movement at the top section of the truck entrance (refer to **Photo 2.3**).



Photo 2.3 – A view of the truck entrance plastic strips as found on 21 December 2022

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**.

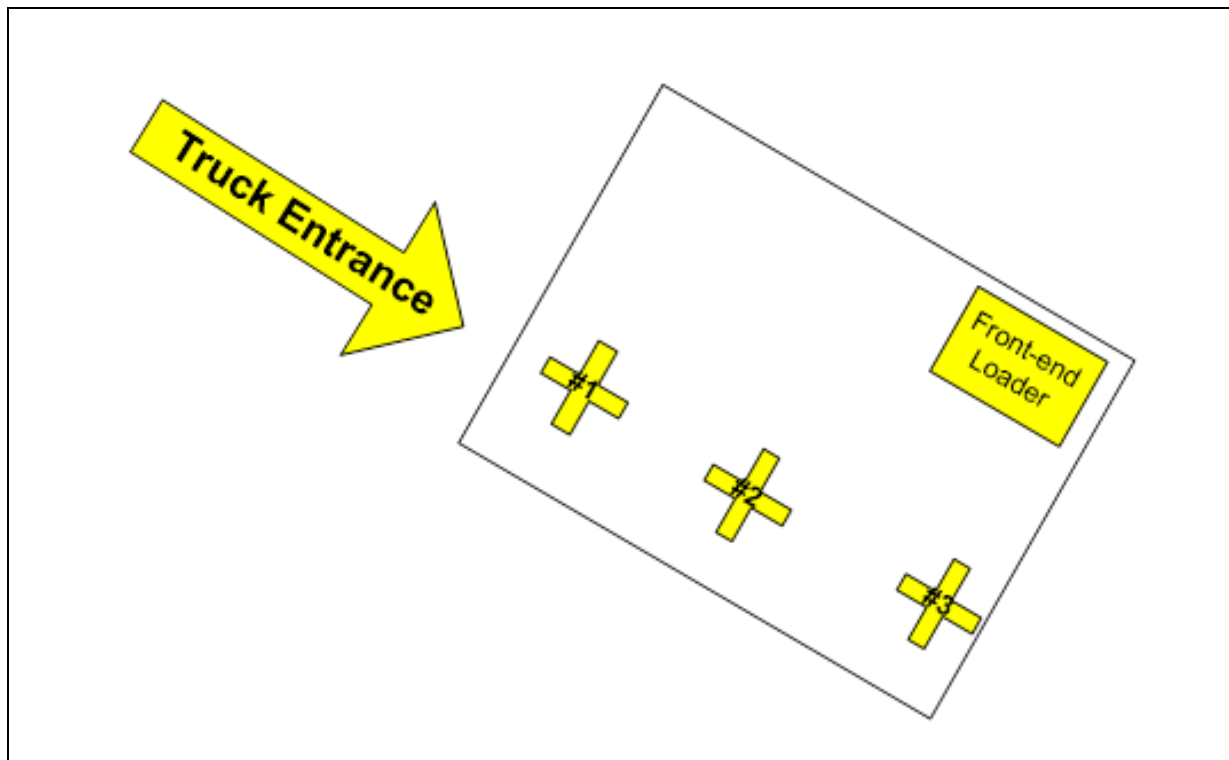


Figure 2.1 – Smoke testing release points within the TTB on 21 December 2022



Photo 2.4 – A view of the truck entrance plastic strips during smoke testing on 21 December 2022

2.1.8.1 Smoke Testing Results

Smoke Testing Point #1

The smoke released at this point initially moved horizontally inwards and gradually rose towards the extraction system. Visible smoke extraction at the overhead capture points was evident during the smoke testing at this point.

Smoke Testing Point #2

The smoke released at this point gradually rose towards the roof and then towards the extraction system.

Smoke Testing Point #3

The smoke released at this point revealed a similar result to that documented for smoke testing point #2.

2.2 ODOUR COMPLAINTS HANDLING AND METEOROLOGICAL DATA

2.2.1 **Odour Complaints Handling**

As advised by Veolia personnel, there continue to 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 June 2022 and December 2022, 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 21 December 2022 between 1411 hrs and 1453 hrs. The FAOA survey was undertaken at strategic off-site locations during the Odour Audit due to prevailing meteorological conditions. 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 upwind and downwind locations of the TTB.

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.

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. This is a good outcome and reflects the findings from previous odour audits. 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 June 2022 odour audit actions and status as of the Odour Audit:

- **Previous Audit Action 1:** *Action 1 – Continue with the on-going review and commitment to continuous improvement of the Draft OEMP and referenced documents.*
- **Status:** On-going and will be reassessed in the next odour audit.

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. The truck entrance plastic strips were superficially damaged, but functional and effective. 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 June 2022 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.**

3.6 OFF-SITE ODOUR IMPACTS

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.

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

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

3.7 ODOUR MANAGEMENT PROCEDURES/PLAN

At the timing of the writing of the Odour Audit, the February 2010 OMP was last updated over eight 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.**

3.8 CONCLUDING REMARK

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

The next Odour Audit is due in **June 2023**.



VEOLIA (AUSTRALIA) PTY LTD

Clyde Waste Transfer Terminal

Odour Audit XXXX

Appendices

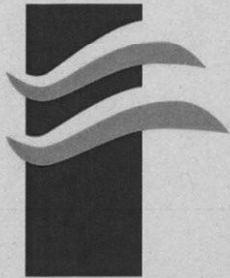
December 2022



APPENDIX A:

ODOUR EXTRACTION SYSTEM SERVICE REPORTS

(JUNE 2022 – DECEMBER 2022)



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

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E-mail: independentairflow@optusnet.com

Web Address: www.independentairflow.com.au

Accredited for compliance with ISO/IEC 17025- Testing

The results of the tests, calibrations and / or measurements included in this document
are traceable to Australian / National Standards

NATA is a signatory to the APLAC mutual recognition arrangement for the mutual
recognition of the equivalence of testing, calibration and inspection of reports

Accreditation No: **3098**

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TEST REPORT

DATE: 05/12/2022

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: SH341/22

Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed

EQUIPMENT	SERIAL NUMBERS	CALIBRATION DUE
Anemometer	T57251334001	May 2023
Manometer	T58252216002	June 2023

TEST METHOD	TEST DESCRIPTION	TEST REQUIREMENT	PAGE	RESULTS	PASS/FAIL
AS/NZS14644.3 (Clause B.4.3.2)	Supply Airflow Rate Calculate from Exhaust Face Velocity	N/A	Page 6	21 Air Changes Per Hour	RECORDED

REMARKS AND RECOMMENDATIONS

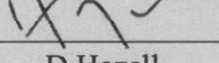
Exhaust Grille Baffles 9 & 10 are becoming excessively Blocked and Covered with Dirty/Grime.

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: December 2023

Checked/Accredited Signatory: 
D.Hazell

Date of Issue: 07/12/2022

Clyde Transport Terminal (Veolia) Signatory _____

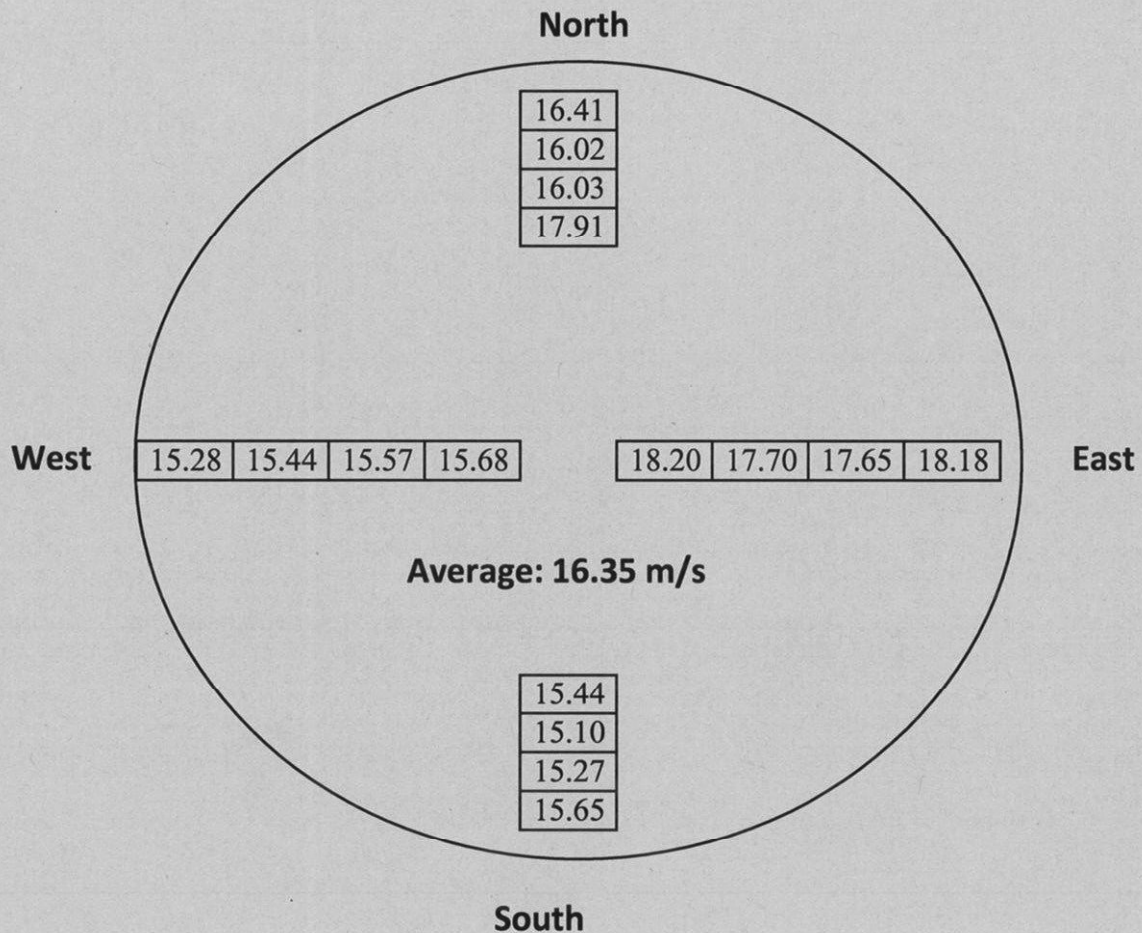
Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

Exhaust Stack

AIR VELOCITY

SUPPLY AIRFLOW VELOCITY *(Clause B.2.2.2)*



All readings in meter per second - m/s

Correction Factors (Already Applied)

>5.01	0.00
-------	------

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

Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

Exhaust Stack

PHOTO - NOT TO SCALE



Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

Western Side | Exhaust Grilles

AIR VELOCITY

SUPPLY AIRFLOW VELOCITY (Clause B.2.2.2)

Exhaust Grille 1

4.45	4.48	AVG: 4.47
4.75	4.21	

Exhaust Grille 2

4.60	3.75	AVG: 4.20
4.35	4.09	

Exhaust Grille 3

5.10	5.05	AVG: 5.22
5.63	5.10	

Exhaust Grille 4

5.03	5.50	AVG: 5.40
6.33	4.74	

Exhaust Grille 5

6.41	6.27	AVG: 6.34
6.58	6.11	

Exhaust Grille 6

5.58	6.03	AVG: 6.22
7.30	5.97	

Exhaust Grille 7

6.84	4.74	AVG: 5.59
5.38	5.38	

Exhaust Grille 8

7.75	6.00	AVG: 6.82
7.55	5.97	

All readings in meter per second - m/s

Correction Factors (Already Applied)

>5.01	0.00
-------	------

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

Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

Eastern Side | Exhaust Grilles

AIR VELOCITY

SUPPLY AIRFLOW VELOCITY (Clause B.2.2.2)

Exhaust Grille 9

9.23	9.21	AVG: 8.90
8.88	8.27	

Exhaust Grille 10

7.97	6.81	AVG: 7.54
7.93	7.44	

Exhaust Grille 11

9.12	9.58	AVG: 9.39
8.63	10.22	

Exhaust Grille 12

8.36	9.31	AVG: 8.72
7.94	9.25	

Exhaust Grille 13

7.09	7.73	AVG: 7.20
6.67	7.31	

Exhaust Grille 14

6.82	6.60	AVG: 6.61
6.31	6.71	

Exhaust Grille 15

5.95	5.30	AVG: 5.69
5.84	5.65	

All readings in meter per second - m/s

Correction Factors (Already Applied)

>5.01	0.00
-------	------

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

Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed

Test Method: AS ISO14644.3 Method B.2(Clause B.2.3.2) - Air Change Rate

TOTAL AIR QUANTITIES

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

Exhaust Grille	Face Area Calculation	Face Area m ²	Average Velocity m/s	Air Quantity m ³ /h
1	1.200 x 1.200	1.440	4.47	23172.48
2	1.200 x 1.200	1.440	4.20	21772.80
3	1.200 x 1.200	1.440	5.22	27060.48
4	1.200 x 1.200	1.440	5.40	27993.60
5	1.200 x 1.200	1.440	6.34	32866.56
6	1.200 x 1.200	1.440	6.22	32244.48
7	1.200 x 1.200	1.440	5.59	28978.56
8	1.200 x 1.200	1.440	6.82	35354.88
9	1.200 x 1.200	1.440	8.90	46137.60
10	1.200 x 1.200	1.440	7.54	39087.36
11	1.200 x 1.200	1.440	9.39	48677.76
12	1.200 x 1.200	1.440	8.72	45204.48
13	1.200 x 1.200	1.440	7.20	37324.80
14	1.200 x 1.200	1.440	6.61	34266.24
15	1.200 x 1.200	1.440	5.69	29496.96
Total Air Quantity				509639.04

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	509639.04	24558.00	21	RECORDED

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

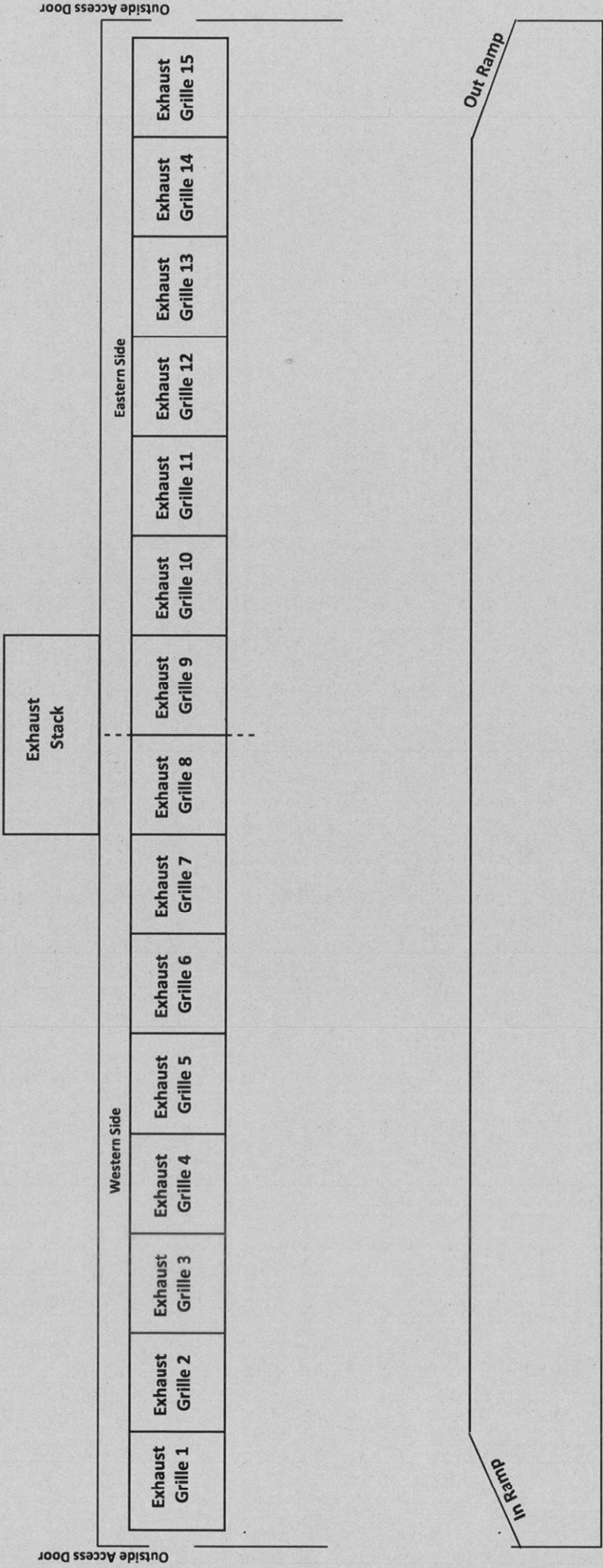
IF APPLICABLE ALL SCREENS REMOVED FOR FACE AREA CALCULATIONS

Face Area Calculation and Room Volume completed using Tape Measure Serial No: SA01

Certificate No: SH341/22

Clyde Transport Terminal (Veolia)

EA1 & 2 | Disposal Shed



Clyde Transport Terminal (Veolia)

EAF 1 & 2 | Disposal Shed

PHOTO - NOT TO SCALE

Western Side



Eastern Side



Certificate No: SH341/22

Equilibrium Air Conditioning Services Pty Ltd

ABN 51 844 035 531

Telephone: (02) 9439 4822

service@eqac.com.au

PO Box 7996

Norwest NSW 2153



CUSTOMER JOB NO. 32746 - Steve Hortis

Project Name Monthly Maintenance

Date Created 01/06/2022

PO # 7100337757

Site Details

Name Veolia Clyde
Address Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142
Contact Rod Jones
Telephone
Mobile 0437 167 211
Email rod.jones@veolia.com

Customer Details

Name Veolia Environmental Services P/L
Address Level 4, 65 Pirrama Road
Pyrmont NSW 2009
Contact Bob Manevski
Telephone (02) 9841 2802
Mobile 0412 275 133
Email bob.manevski@veolia.com

Work Requested

Attend Site and carry out maintenance for the month of June

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Marcus Jackson (16/06/2022) - Work Note

Carried out scheduled inspection and maintenance of A/C system and extraction fans.
Checked belts on extraction fans for correct tension, damage and wear, found the belts to be in good condition.
Checked pulleys for wear and damage, all ok.
Checked fan motors for operation and condition, all ok.
Checked VSD drives for abnormalities and condition, all ok.
Greased fan bearings and motors.
Cleaned all filters in site office and weigh bridge
Flushed all the drains
Checked coil condition and electrical terminals, all ok.

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Norwest NSW 2153



CUSTOMER JOB NO. 32746 - Steve Hortis

For my safety and well-being during COVID-19, I cannot provide my signature, however, I confirm that the technician was onsite to carry out the above mentioned works.

Customer:

_____	_____
Print Name	Signature

Technician:

_____	_____
Print Name	Signature

Equilibrium Air Conditioning Services Pty Ltd

ABN 51 844 035 531

Telephone: (02) 9439 4822

service@eqac.com.au

PO Box 7996

Norwest NSW 2153



CUSTOMER JOB NO. 32829 - 3051 - Ben Eldridge Preventative Maintenance

Project Name Monthly Maintenance

Date Created 29/06/2022

PO # 7100337757

Site Details

Name Veolia Clyde
Address Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142
Contact Rod Jones
Telephone
Mobile 0437 167 211
Email rod.jones@veolia.com

Customer Details

Name Veolia Environmental Services P/L
Address Level 4, 65 Pirrama Road
Pymont NSW 2009
Contact Bob Manevski
Telephone (02) 9841 2802
Mobile 0412 275 133
Email bob.manevski@veolia.com

Work Requested

Attend Site and carry out maintenance for the month of

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Ben Eldridge (14/07/2022) - Work Note

Carried out maintenance for month of July.
Checked site office split systems and weigh bridge.
Checked / washed filters where required.
Tested operation in heating. All systems tested ok.
Checked Belts on Extraction Fan 1&2
Belts - ok
Belt tension requires, slight adjustment.
Return to site to adjust tension.
Checked operation of Extraction Fan-1&2 tested ok.
Checked VSD Extraction fan 1&2.
VSD tested - ok

Completed Asset register.

ABN 51 844 035 531

Telephone: (02) 9439 4822

service@eqac.com.au

PO Box 7996

Norwest NSW 2153



CUSTOMER JOB NO. 32829 - 3051 - Ben Eldridge
Preventative Maintenance

For my safety and well-being during COVID-19, I cannot provide my signature, however, I confirm that the technician was onsite to carry out the above mentioned works.

Customer:

joe

Print Name _____



Signature

Technician:

Ben Eldridge

Print Name



Signature

Equilibrium Air Conditioning Services Pty Limited
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 32829
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 14/07/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - Air-Cooled DX units / Split Systems							
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Pass / Fail
3253	Change room RAC	Changeroom	TECO	TWW16CFCG		Change room	Pass
3248	Manager office Wall AC	Manager office	Mitsubishi Electric	MSZ-GE35VAD	0000533	Manager's office	Pass
3249	Administration office Wall AC	Administration office	Samsung	AR09FSSSCWKN		Administration office	Pass
3250	Comms room Wall AC	Comms room	Mitsubishi Electric	MSZ-AP25VGD	0029477	Comms room	Pass
3251	Meeting room Wall AC	Meeting room	Samsung	AR12FSFS DURN	0BLAPAJFA00098 V	Meeting room	Pass
3252	Lunch room Wall AC	Lunch room	Mitsubishi Electric	MSZ-GE35VAD	8003334	Lunchroom	Pass
3285	Weighbridge office wall split AC	Weighbridge office	Panasonic	CU-E12PKR	6534700845	Weighbridge office	Pass

Asset Register - Fans							
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Pass / Fail
3879	Extraction Fan-1	Roof plant room	HG	Y315S		Waste area	Pass
3880	Extraction Fan-2	Roof plant room	HG	Y315S		Waste area	Pass

Asset Register - VSD							
Asset ID	Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Pass / Fail
3881	VSD Extraction Fan-1	Roof plant room	Danfoss	131B8508		Extraction Fan-1	Pass

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Asset Record - Job No. 32829
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 14/07/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD										
Asset ID		Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3882		VSD Extraction Fan-2	Roof plant room	Danfoss	131B8508		Extraction Fan-2	14/07/2022	Monthly	Pass

Description Of Work

Attend Site and carry out maintenance for the month of

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Comments / Recommendations

**Equilibrium Air Conditioning Services Pty
Limited**
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 32829
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 14/07/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Technician (Print Name):

Ben Eldridge

Technician (Signature):



Licence No.

L123305

Customer (Print Name):

joe

Customer (Signature):





CUSTOMER JOB NO. 32909 - 3133 - Kyle Dempsey
Preventative Maintenance

Project Name Monthly Maintenance - August

Date Created 03/08/2022

PO # 7100337757

Site Details

Name Veolia Clyde
Address Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142
Contact Rod Jones
Telephone
Mobile 0437 167 211
Email rod.jones@veolia.com

Customer Details

Name Veolia Environmental Services P/L
Address Level 4, 65 Pirrama Road
Pyrmont NSW 2009
Contact Bob Manevski
Telephone (02) 9841 2802
Mobile 0412 275 133
Email bob.manevski@veolia.com

Work Requested

Attend Site and carry out maintenance for the month of August 2022

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Kyle Dempsey (05/08/2022) - Work Note

Conducted maintenance on 2 extraction fans serving the compactor pit.

Firstly isolated power

Airflow sensor alarm had tripped so checked on sensors

One had fallen off the mount.

Re-installed sensor and cleaned out tubing.

Checked belts and pulleys

Checked condition of VSDs

Cleaned off dust and dirt off motor.

Turned power back on to fans and tested to run and also testing the sensors.

Operations are now running normally.

Conducted maintenance on AC systems in the administration office and weighbridge office which includes 6 wall split systems and 3 Room Air Conditioners (RACs).

Cleaned filters

Flushed out condensate drains

Tested operations of each system in full cooling and heating mode and high fan speed

Checked electrical components

Checked for faults and/or damage to units

Checked airflows are sufficient

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PO Box 7996
Norwest NSW 2153





CUSTOMER JOB NO. 32909 - 3133 - Kyle Dempsey
Preventative Maintenance

Checked room temperatures are matching setpoint.
All tested okay.

For outdoor units
Checked electrical components
Checked wiring for damaged cables and tightened terminals
Checked pipework for leaks or damage
Checked units for faults or damage
Checked condition of outdoor coils.
All tested okay.

For my safety and well-being during COVID-19, I cannot provide my signature, however, I confirm that the technician was onsite to carry out the above mentioned works.

Customer:	Rod Jones	
	Print Name	Signature
Technician:	Kyle Dempsey	
	Print Name	Signature

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Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 32909
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 05/08/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD									
Asset ID	Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3881	VSD Extraction Fan-1	Roof plant room	Danfoss	131B8508		Extraction Fan-1	05/08/2022		Pass
Notes	Operations are running normally, no faults or damage to report.								

Asset Register - Air-Cooled DX units / Split Systems									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3248	Manager office Wall AC	Manager office	Mitsubishi Electric	MSZ-GE35VAD	0000533	Manager's office	05/08/2022		Pass
Notes	-Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay. - for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of outdoor coil. All tested okay.								
3249	Administration office Wall AC	Administration office	Samsung	AR09FSSSCWKN		Administration office	05/08/2022		Pass
Notes	--Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay. - for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of outdoor coil. All tested okay.								
3250	Comms room Wall AC	Comms room	Mitsubishi Electric	MSZ-AP25VGD	0029477	Comms room	05/08/2022		Pass
Notes	--Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay. - for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of								

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Asset Record - Job No. 32909
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 05/08/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

	outdoor coil. All tested okay.					
3251	Meeting room Wall AC	Meeting room	Samsung	AR12FSFS DURN	0BLAPAJFA00098 V	Meeting room
Notes	--Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay.					
	- for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of outdoor coil. All tested okay.					
3252	Lunch room Wall AC	Lunch room	Mitsubishi Electric	MSZ-GE35VAD	8003334	Lunchroom
Notes	--Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay.					
	- for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of outdoor coil. All tested okay.					
3253	Change room RAC	Changeroom	TECO	TWW16CF CG		Change room
Notes	Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay.					
3285	Weighbridge office wall split AC	Weighbridge office	Panasonic	CU-E12PKR	6534700845	Weighbridge office
Notes	--Filters have been cleaned, flushed condensate drain, tested operations of system in full cooling and heating mode and high fan speed, checked electrical components, checked for faults and/or damage to unit, checked airflow is sufficient, checked room temperature is matching setpoint. All tested okay.					
	- for outdoor unit, checked electrical components, checked wiring for damaged cables and tightened terminals, checked pipework for leaks or damage, checked unit for faults or damage, checked condition of outdoor coil. All tested okay.					

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Asset Record - Job No. 32909
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 05/08/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - Fans									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3879	Extraction Fan-1	Roof plant room	HG	Y315S		Waste area	05/08/2022		Pass
Notes	- belts and pulleys are okay, bearings are okay, cleaned up dust and dirt from housing and motor, cleaned out sensor. All tested okay.								
	- Remounted and cleaned out velocity sensor after alarm had tripped. Operations now running normally.								
3880	Extraction Fan-2	Roof plant room	HG	Y315S		Waste area	05/08/2022		Pass
Notes	-- belts and pulleys are okay, bearings are okay, cleaned up dust and dirt from housing and motor, cleaned out sensor. All tested okay.								

Asset Register - VSD									
Asset ID	Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3882	VSD Extraction Fan-2	Roof plant room	Danfoss	131B8508		Extraction Fan-2	05/08/2022		Pass
Notes	-Operations are running normally, no faults or damage to report.								

Description Of Work

Attend Site and carry out maintenance for the month of August 2022

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

**Equilibrium Air Conditioning Services Pty
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Asset Record - Job No. 32909

Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 05/08/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Kyle Dempsey (05/08/2022) - Work Note

Conducted maintenance on 2 extraction fans serving the compactor pit.

Firstly isolated power

Airflow sensor alarm had tripped so checked on sensors

One had fallen off the mount.

Re-installed sensor and cleaned out tubing.

Checked belts and pulleys

Checked condition of VSDs

Cleaned off dust and dirt off motor.

Turned power back on to fans and tested to run and also testing the sensors.

Operations are now running normally.

Conducted maintenance on AC systems in the administration office and weighbridge office which includes 6 wall split systems and 3 Room Air Conditioners (RACs).

Cleaned filters

Flushed out condensate drains

Tested operations of each system in full cooling and heating mode and high fan speed

Checked electrical components

Checked for faults and/or damage to units

Checked airflows are sufficient

Checked room temperatures are matching setpoint.

All tested okay.

For outdoor units

Checked electrical components

Checked wiring for damaged cables and tightened terminals

Checked pipework for leaks or damage

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Asset Record - Job No. 32909
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 05/08/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Checked units for faults or damage
Checked condition of outdoor coils.
All tested okay.

Comments / Recommendations

Technician (Print Name):

Kyle Dempsey

Technician (Signature):



Licence No.

L141692

Customer (Print Name):

Customer (Signature):

Rod Jones





CUSTOMER JOB NO. 33032 - 3256 - Marcus Jackson
Preventative Maintenance

Project Name Monthly Maintenance

Date Created 27/09/2022

PO # 7100337757

Site Details

Name Veolia Clyde
Address Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142
Contact Rod Jones
Telephone
Mobile 0437 167 211
Email rod.jones@veolia.com

Customer Details

Name Veolia Environmental Services P/L
Address Level 4, 65 Pirrama Road
Pyrmont NSW 2009
Contact Bob Manevski
Telephone (02) 9841 2802
Mobile 0412 275 133
Email bob.manevski@veolia.com

Work Requested

Attend Site and carry out maintenance for the month of October

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Marcus Jackson (04/10/2022) - Work Note

Arrived on site to carry out inspection and maintenance of A/C system and extraction fans.

Checked operation and condition of all site office units, cleaned filters, flushed drains and checked supply temperatures, all ok.

Checked VSD in plantroom for extraction fans, all ok.

Checked extraction fan belts all ok.

For my safety and well-being during COVID-19, I cannot provide my signature, however, I confirm that the technician was onsite to carry out the above mentioned works.

Customer: Rod Jones

Print Name

Signature

Technician: Marcus Jackson

Print Name

Signature

Equilibrium Air Conditioning Services Pty Limited
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 32959
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 01/09/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD										
Asset ID		Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3881		VSD Extraction Fan-1	Roof plant room	Danfoss	131B8508		Extraction Fan-1	01/09/2022		Pass

Asset Register - Air-Cooled DX units / Split Systems									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3248	Manager office Wall AC	Manager office	Mitsubishi Electric	MSZ-GE35VAD	0000533	Manager's office	01/09/2022		Pass
3249	Administration office Wall AC	Administration office	Samsung	AR09FSSSCWKN		Administration office	01/09/2022		Pass
3250	Comms room Wall AC	Comms room	Mitsubishi Electric	MSZ-AP25VGD	0029477	Comms room	01/09/2022		Pass
3251	Meeting room Wall AC	Meeting room	Samsung	AR12FSFSDURN	0BLAPAJFA00098 V	Meeting room	01/09/2022		Pass
3252	Lunch room Wall AC	Lunch room	Mitsubishi Electric	MSZ-GE35VAD	8003334	Lunchroom	01/09/2022		Pass
3253	Change room RAC	Changeroom	TECO	TWW16CFCG		Change room	01/09/2022		Pass
3285	Weighbridge office wall split AC	Weighbridge office	Panasonic	CU-E12PKR	6534700845	Weighbridge office	01/09/2022		Pass

Asset Register - Fans																			
Asset ID		Unit ID		Unit Location		Brand		Model Number		Serial Number		Serving		Date		Service		Pass / Fail	
3879		Extraction Fan-1		Roof plant room		HG		Y315S				Waste area		01/09/2022				Pass	
3880		Extraction Fan-2		Roof plant room		HG		Y315S				Waste area		01/09/2022				Pass	

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Asset Record - Job No. 32959
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 01/09/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD										
Asset ID		Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3882		VSD Extraction Fan-2	Roof plant room	Danfoss	131B8508		Extraction Fan-2	01/09/2022		Pass

Description Of Work

Attend Site and carry out maintenance for the month of September

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Dylan Mengel (01/09/2022) - Work Note

Attended site and inspected 9x split system air conditioner's.

Washed filters

Flushed drains and tightened electrical terminals.

Tested on full cooling and heating modes to ensure set-point is reached.

Tested on high fan speed to confirm airflow is good. All tested ok.

Inspected 2x extraction fans.

Checked belts tension and for damage.

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Asset Record - Job No. 32959
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 01/09/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Belts are ok.
Greased motor and fan bearings
Checked VSD's and general operations of extraction fans.
All tested ok.

Duct and exhaust Clean was carried out over 3 days last week in September

Comments / Recommendations

Technician (Print Name):

Dylan Mengel

Technician (Signature):



Customer (Print Name):

Rod Jones

Customer (Signature):



Licence No.

L177835

Equilibrium Air Conditioning Services Pty Limited
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33032
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 04/10/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD									
Asset ID	Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3881	VSD Extraction Fan-1	Roof plant room	Danfoss	131B8508		Extraction Fan-1	04/10/2022		Pass

Asset Register - Air-Cooled DX units / Split Systems									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3248	Manager office Wall AC	Manager office	Mitsubishi Electric	MSZ-GE35VAD	0000533	Manager's office	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3249	Administration office Wall AC	Administration office	Samsung	AR09FSSSCWKN		Administration office	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3250	Comms room Wall AC	Comms room	Mitsubishi Electric	MSZ-AP25VGD	0029477	Comms room	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3251	Meeting room Wall AC	Meeting room	Samsung	AR12FDFS DURN	0BLAPAJFA00098 V	Meeting room	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3252	Lunch room Wall AC	Lunch room	Mitsubishi Electric	MSZ-GE35VAD	8003334	Lunchroom	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3253	Change room RAC	Changeroom	TECO	TWW16CFCG		Change room	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								
3285	Weighbridge office wall split AC	Weighbridge office	Panasonic	CU-E12PKR	6534700845	Weighbridge office	04/10/2022		Pass
Notes	Cleaned filters flushed drain checked operation.								

Equilibrium Air Conditioning Services Pty Limited
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Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33032
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 04/10/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - Fans									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3879	Extraction Fan-1	Roof plant room	HG	Y315S		Waste area	04/10/2022		Pass
Notes	New belts								
3880	Extraction Fan-2	Roof plant room	HG	Y315S		Waste area	04/10/2022		Pass
Notes	New belts								

Asset Register - VSD										
Asset ID		Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3882		VSD Extraction Fan-2	Roof plant room	Danfoss	131B8508		Extraction Fan-2	04/10/2022		Pass

Description Of Work

Attend Site and carry out maintenance for the month of October

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Marcus Jackson (04/10/2022) - Work Note

**Equilibrium Air Conditioning Services Pty
Limited**
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33032
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 04/10/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Arrived on site to carry out inspection and maintenance of A/C system and extraction fans.
Checked operation and condition of all site office units, cleaned filters, flushed drains and checked supply temperatures, all ok.
Checked VSD in plantroom for extraction fans, all ok.
Checked extraction fan belts all ok.

Comments / Recommendations

Technician (Print Name):

Marcus Jackson

Technician (Signature):



Customer (Print Name):

Rod Jones

Customer (Signature):



Licence No.

L174342

Equilibrium Air Conditioning Services Pty Limited
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33122
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 03/11/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Asset Register - VSD									
Asset ID	Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3881	VSD Extraction Fan-1	Roof plant room	Danfoss	131B8508		Extraction Fan-1	03/11/2022		Pass
Notes	Checked belts grease bearings checked operation of fan all tested okay								

Asset Register - Air-Cooled DX units / Split Systems									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3248	Manager office Wall AC	Manager office	Mitsubishi Electric	MSZ-GE35VAD	0000533	Manager's office	03/11/2022		Pass
Notes	Washed filters cleared drains checked outdoor units all tested okay								
3249	Administration office Wall AC	Administration office	Samsung	AR09FSSSCWKN		Administration office	03/11/2022		Pass
Notes	Washed filters cleared drains checked outdoor unit all tested okay								
3250	Comms room Wall AC	Comms room	Mitsubishi Electric	MSZ-AP25VGD	0029477	Comms room	03/11/2022		Pass
Notes	Washed filters cleared drain checked outdoor electrical connections all tested okay								
3251	Meeting room Wall AC	Meeting room	Samsung	AR12FSDURN V	0BLAPAJFA00098	Meeting room	03/11/2022		Pass
Notes	Washed filters cleared drains checked outdoor electrical connections all tested okay								
3252	Lunch room Wall AC	Lunch room	Mitsubishi Electric	MSZ-GE35VAD	8003334	Lunchroom	03/11/2022		Pass
Notes	Washed filters cleared drains checked outdoor unit all tested okay								
3253	Change room RAC	Changeroom	TECO	TWW16CFCG		Change room	03/11/2022		Pass
Notes	Washed filter checked electrical connection all tested okay								
3285	Weighbridge office wall split AC	Weighbridge office	Panasonic	CU-E12PKR	6534700845	Weighbridge office	03/11/2022		Pass

Equilibrium Air Conditioning Services Pty Limited
Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33122
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 03/11/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Notes	Washed filters checked outdoor unit cleared drain all tested okay									
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Asset Register - Fans									
Asset ID	Unit ID	Unit Location	Brand	Model Number	Serial Number	Serving	Date	Service	Pass / Fail
3879	Extraction Fan-1	Roof plant room	HG	Y315S		Waste area	03/11/2022		Pass
Notes	Checked belts grease bearings all tested okay								
3880	Extraction Fan-2	Roof plant room	HG	Y315S		Waste area	03/11/2022		Pass
Notes	Checked belts grease bearings all tested okay								

Asset Register - VSD										
Asset ID		Unit ID	Unit Location	Brand	Model No	Serial No	Serving	Date	Service	Pass / Fail
3882		VSD Extraction Fan-2	Roof plant room	Danfoss	131B8508		Extraction Fan-2	03/11/2022		Pass
Notes		Checked belts greased bearings all tested okay								

Description Of Work

Attend Site and carry out maintenance for the month of November

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

**Equilibrium Air Conditioning Services Pty
Limited**

Unit 7, 38 Brookhollow Ave
Norwest, NSW 2153
Ph: 02 94394822 Fax:
ABN 51 844 035 531

Asset Record - Job No. 33122

Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 03/11/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Dylan Mengel (03/11/2022) - Technician Note

Please note there is no light in fan chamber and chamber is very dirty this is an OHS Hazard. (Rod has fixed this since our visit)

Dylan Mengel (03/11/2022) - Work Note

Conducted general maintenance on 6x split system air conditioners and 2x extraction fans.

Split systems:

Washed filters and flushed condensate drain.

Tested operations of unit in full cooling and heating mode on high fan speed

Checked electrical components

Checked for faults and/or damage to unit.

Checked airflow is sufficient

Checked room temperature is meeting set point. Tested ok.

Extraction fans:

Inspected extraction fan.

Checked belt condition and tension.

Condition and tension is ok.

**Equilibrium Air Conditioning Services Pty
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Ph: 02 94394822 Fax:
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Asset Record - Job No. 33122
Veolia Clyde
Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142

Inspection Date: 03/11/2022
Contact: Bob Manevski
Phone: (02) 9841 2802

Checked electrical components of motor for any burnt/damaged wiring.
Tightened electrical components
Greased pump and fan bearings.

Comments / Recommendations

Technician (Print Name):

Steve Hortis

Technician (Signature):



Licence No.

L026231

Customer (Print Name):

Rod Jones

Customer (Signature):





CUSTOMER JOB NO. 33254 - 3516 - Kyle Dempsey
Preventative Maintenance

Project Name Monthly Maintenance

Date Created 21/12/2022

PO # 7100410672

Site Details

Name Veolia Clyde
Address Clyde Transfer Terminal
322 Parramatta road
Clyde NSW 2142
Contact Rod Jones
Telephone
Mobile 0437 167 211
Email rod.jones@veolia.com

Customer Details

Name Veolia Environmental Services P/L
Address Level 4, 65 Pirrama Road
Pyrmont NSW 2009
Contact Bob Manevski
Telephone (02) 9841 2802
Mobile 0412 275 133
Email bob.manevski@veolia.com

Work Requested

Attend Site and carry out maintenance for the month of January

Programmed maintenance service for the HVAC (Heating, Ventilation and Air-conditioning) system onsite.

- Extraction Fans x 02
- Variable Speed Drives x 02
- AC Units Serving Admin Office x 08 (3 ducted and 5 splits)
- Air balancing / Air flow testing 2 times per year
- Cleaning of Fans and Plenum 2 times per year

Kyle Dempsey (06/01/2023) - Work Note

Firstly conducted maintenance on AC systems serving the main admin office.
This includes 7 systems ranging from wall split systems to Room Air Conditioners.
Also included is 1 wall split system serving weighbridge office.
Filters are all okay
Condensate drains have been flushed and cleared
Checked operations of systems in full cooling mode and high fan speed
Checked electrical components
Checked for faults and/or damage to units
Checked airflows are sufficient
Checked room temperatures are matching setpoint.
All tested okay.

Conducted maintenance on 2 extraction air fans serving the compactor pit.
Belts, pulleys and bearings are in good condition
Cleaned off dust and debris from motors
Greased fan shaft bearings
Checked condition of VSDs and cleaned off dust and debris.
Checked over parameters and data of drives.
All tested okay.

Equilibrium Air Conditioning Services Pty Ltd

ABN 51 844 035 531

Telephone: (02) 9439 4822

service@eqac.com.au

PO Box 7996

Norwest NSW 2153



**CUSTOMER JOB NO. 33254 - 3516 - Kyle Dempsey
Preventative Maintenance**



Equilibrium Air Conditioning Services Pty Ltd
ABN 51 844 035 531

Telephone: (02) 9439 4822
service@egac.com.au

PO Box 7996
Norwest NSW 2153



**CUSTOMER JOB NO. 33254 - 3516 - Kyle Dempsey
Preventative Maintenance**

For my safety and well-being during COVID-19, I cannot provide my signature, however, I confirm that the technician was onsite to carry out the above mentioned works.			
Customer:	Rod Jones		
	_____ Print Name	_____ Signature	
Technician:	Kyle Dempsey		
	_____ Print Name	_____ Signature	



APPENDIX B:
WEATHER DATA CALIBRATION REPORTS
(JULY 2022 & OCTOBER 2022)

7/7/2022

Anea Ressos
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Anae,

As per our service agreement, on the 7/7/22 HS 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 7/7/22](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	13.9	13.9
2m*	13.9	13.9
Relative Humidity*	81.0	81.2
Wind Speed	3.0 m/s at ground	4.3 m/s at 10 metres
Wind Direction	220	220
Solar Radiation	40	37
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 0740 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 7/7/22](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	15.1	15.4
2m*	15.1	15.2
Relative Humidity*	79.5	79.3
Wind Speed	2.3 m/s at ground (poor exposure at ground)	4.1 m/s at 10 metres.

Wind Direction	200	200
Solar Radiation	160	175
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 0845 EST as these were testing.

Note 3: Replace switch on TBRG

Additional Items

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

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

Should you require any further information on this report please do not hesitate to contact me on 0420316459.

Phil Evison.

Hydrometric Services Pty Ltd
 ABN 32655577567
 Mob 0420316459
 Email phil@hydrometric.com.au
www.hydrometric.com.au

14/10/2022

Anea Ressos
Veolia Environmental Services (Australia) Pty Ltd

Re – Quarterly service of weather stations

Dear Anae,

As per our service agreement, on the 14/10/22 HS 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 14/10/22](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	24.1	23.02
2m*	24.1	23.9
Relative Humidity*	39.0	37.0
Wind Speed	3.0 m/s at ground	4.5 m/s at 10 metres
Wind Direction	270	270
Solar Radiation	860	859
TBRG	10mm	20 tips
Battery/Solar	14.2	

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

Note 2: Ignore rainfall tips logged at approximately 1045 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 14/10/22](#)

Sensor	Actual (field)	Logger
Temperature – 10m*	24.0	23.9
2m*	24.0	23.5
Relative Humidity*	40.0	39.0
Wind Speed	3.0 m/s at ground (poor exposure at ground)	4.2 m/s at 10 metres.

Wind Direction	260	260
Solar Radiation	250	260
TBRG	10mm	20 tips
Battery/Solar	12.6	

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

Note 2: Ignore rainfall tips logged at approximately 0945 EST as these were testing.

Note 3: TBRG had been knocked over. Repaired.

Additional Items

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

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




Should you require any further information on this report please do not hesitate to contact me on 0420316459.

Phil Evison.



APPENDIX C:
FIELD AMBIENT ODOUR ASSESSMENT PLOT AND FIELD SHEET
(21 DECEMBER 2022)



<div>DESCRIPTION</div> <div>Field Ambient Odour Assessment Survey</div> <div>Modified German Standard VDI 3940</div>		<div>LEGEND</div> <div>German Intensity Scale VDI3882</div> <div><div>0 Not detectable</div><div>1 Very weak</div><div>2 Weak</div><div>3 Distinct</div><div>4 Strong</div><div>5 Very strong</div><div>6 Extremely strong</div></div>		<div>VEOLIA</div> <div>Veolia (Australia) Pty Ltd</div> <div>Clyde Transfer Terminal, Clyde, NSW</div> <div>Field Ambient Odour Assessment Survey</div> <div>Survey Date: 21 December 2022</div> <div>Survey Time Period: 1411 hrs to 1453 hrs</div>		
	<div>THE ODOUR UNIT PTY LTD</div> <div>Level 3, 12/56 Church Avenue</div> <div>MASCOT, NSW 2020</div> <div>Phone: (02) 9209 4420</div> <div>www.odourunit.com.au</div>		DRAWN BY	I. FARRUGIA 23/01/2023	<div>Odour Audit XXXX</div> <div>Field Ambient Odour Assessment Survey</div>	Plot No.
			CHECKED	J. SCHULZ 23/01/2023		Job No.
			APPROVED	J. SCHULZ 23/01/2023		N1473L
<div>N</div> <div></div>		<div>Local wind direction</div> <div></div>		<div>Local wind conditions</div> <div>Light to moderate wind speeds, with winds blowing from the southeast. No rainfall observed.</div> <div>Refer to FAOA Logsheet N1473L-XXXX for details on recorded odour detections</div>		



THE ODOUR UNIT PTY LTD

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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: 21 December 2022

Assessor: J. Schulz

Weather Conditions: Light to moderate wind speeds blowing from the southeast. No rainfall observed.

Survey Reference Plot No: N1473L-XXXX

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	14:11-14:16	ESE	2.0 – 3.0	N	--	0	--
2	14:19-14:24	ESE	2.0 – 3.0	N	--	0	--
3	14:22-14:27	ESE	2.0 – 3.0	N	--	0	--
4	14:28-14:33	E	2.0 – 4.0	N	--	0	--
5	14:35-14:40	ESE	2.0 – 4.0	N	--	0	--
6	14:41-14:46	SE	2.0 – 3.0	N	--	0	--
7	14:48-14:53	SE	2.0 – 3.0	N	--	0	--