

Annual Environmental Management Report 2018- 2019

Suez Spring Farm Advanced Resource
Recovery Facility (ARRF)

6 October 2020

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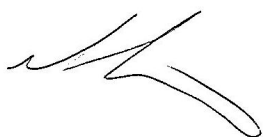
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Suez Spring Farm Advanced Resource Recovery Facility (ARRF)



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TITLE BLOCK

Name of Operation	Jacks Gully Alternative Waste Technology Facility (Suez Spring Farm ARRF)
Name of Operator	SUEZ Recycling and Recovery Pty Ltd
Project Approval #	05_0098
Name of holder of project approval	SUEZ Recycling and Recovery Pty Ltd
Environmental Protection Licence #	12588
Name of holder of EPA Licence	SUEZ Recycling and Recovery Pty Ltd
Annual Review start date	10 October 2018
Annual Review end date	9 October 2019
<p>I, Mgahl Eather, certify that this audit report is a true and accurate record of the compliance status of the Suez Spring Farm ARRF for the period of 10 October 2018 to 9 October 2019 and that I am authorised to make this statement of behalf of SUEZ Recycling and Recovery Pty Ltd.</p>	
Name of authorised reporting officer	Mgahl Eather
Title of authorised reporting officer	Environment & Sustainability Business Partner
Signature of authorised reporting officer	
Date	24 September 2020

1. STATEMENT OF COMPLIANCE

The purpose of the Annual Environmental Management Report (AEMR) is to undertake an assessment and review of compliance, environmental impact predictions and the effectiveness of environmental measures required under Project Approval 05_0098.

The overall assessment of environmental performance for this reporting period demonstrated one non-compliance with the Project Approval. A summary of the AEMR findings is presented in *Table 1.1*. A comprehensive table with compliance status of all Project Approval conditions is included in *Appendix A*.

Table 1.1 Summary of Compliance

Relevant Approval	No. of Conditions Compliant	No. of Conditions Non-Compliant	No. of Conditions Not Verified
Project Approval 05_0098	34	1	0

Non-compliances reported during this AEMR are summarised in *Table 1.2*.

Table 1.2 Summary of Non-Compliances

Relevant Approval	Condition	Summary	Where addressed in the AEMR
Project Approval 05_0098	2.1	Odour survey conducted by EPA officers and numerous odour complaints recorded indicate that the Site generated offensive odours during reporting period as per Section 129 of the POEO Act. Issue has been resolved as source of odours (green waste processing) is no longer conducted at the Site.	Section 7.4, 8.4 and 9.4

2. INTRODUCTION

Environmental Resources Management Australia Pty Ltd (ERM) was commissioned by SUEZ Recycling and Recovery Pty Ltd (SUEZ) to prepare the 2018-2019 Annual Environmental Monitoring Report (AEMR) for the SUEZ Spring Farm Advanced Resource Recovery Facility (ARRF) (the Site). The Site is located at 20 Barrow Road, Spring Farm, New South Wales (NSW), 2570 (Lots 2 - 4 DP 250033 and Lot 2, DP 1076817). The Site location is presented in Figure 1, Annex B and the Site layout is presented in Figure 2, Appendix B.

The Site is regulated by the New South Wales Environment Protection Authority (NSW EPA) under the NSW Protection of the Environment Operations Act 1997 through Environment Protection Licence (EPL) 12588 (the EPL). The EPL permits the operation of a composting facility for organics processing; aerobic and an-aerobic digestion facility and electricity generation plant; and a mechanical pre-treatment area where organic material is separated from general waste (of which the organic material is transferred to the nearby Kemps Creek SAWT). The Site is also permitted to accept liquid waste, including leachate, grease trap waste and liquid food waste. ERM understands that Suez has operated the Site since 2011.

The AEMR is based on information provided by SUEZ. ERM did not conduct a Site visit as part of the preparation of the AEMR and has relied on the accuracy of the information provided by phone interview and subsequent correspondence with Kelly Gee, Compliance Manager for Suez.

2.1 Objective

The objective of this AEMR is to comply with the reporting requirements of Schedule 2, Condition C5 – Annual Reporting of the Sites Project Approval (Modification 5, 16 February 2015) (application number 05_0098) (the PA), included in Appendix C. The specific reporting requirements are described in Section 3.3 of this AEMR.

2.2 Scope of Works

This AEMR assesses data collected from the environmental monitoring program which is implemented at the Site to measure and monitor the Site's overall environmental performance and compliance with the EPL and Project Approval (PA). This AEMR is for the monitoring period of 10 October 2018 to 9 October 2019.

This AEMR is separate to the Independent Environmental Audit (IEA), which is completed every three years in accordance with the PA. The AEMR is an annual self-reporting tool to assess and review environmental performance. ERM have assisted SUEZ in the compilation and review of data, but have not performed a detailed independent verification of data collected by other parties and supplied for collation in this AEMR. Further distinctions between the two processes are provided in Sections 3 and 4.

2.3 Environmental Management Plan

In order to maintain compliance with the Sites licences and approval documents, SUEZ undertakes a monitoring program for the Site which has been designed on an Annual timeframe. The monitoring program incorporates the monitoring required under the Sites licences and approvals as well as additional data collection which is viewed by SUEZ as beneficial from the perspective of environmental diligence. The data collected under this program allows assessment of the Site's compliance with relevant documents and allows assessment of the Site's overall environmental performance. The management strategies which SUEZ employ to mitigate and monitor a number of environmental issues are described in the Spring Farm ARRF Environmental Management Plan (EMP). The EMP specifies the requirements of the monitoring program (described in Section 7), which this AEMR reports on. The EMP is included in Appendix E.

3. LICENSING AND APPROVALS

3.1 NSW EPA Environmental Protection Licence

The Site is regulated by the NSW Environment Protection Authority (EPA) under the Protection of the Environment Operations Act 1997 (POEO Act). The NSW EPA administers its regulation via EPL 12588. The EPL includes the minimum conditions under which the Site may operate in order to maintain compliance with the POEO Act.

The EPL contains conditions which are relevant to the AEMR which include those relating the implementation of a monitoring program. The only environmental parameter specifically requiring data collection under the EPL for monitoring is noise.

During the reporting period the EPL was altered once:

Variation Notice 1580023 (7 June 2019):

- Condition U1.1 – By 3 September 2019, the licensee must enclose the green waste receival bay on three sides.

The EPL is included in Appendix D. The EPL limits are summarised in *Section 8* of this report and an assessment of the Sites monitoring data against the EPL limits is included in *Section 9*.

3.2 Project Approval

The Site is also regulated through conditions of Project Approval (PA) number 05_0098 (provided in *Appendix C*). The Project Approval was issued in 2006 by the NSW Minister for Planning via the Department of Planning and is subject to further approved modifications:

MOD 1: 05_0098 – Change in property description following subdivision

MOD 2: 05_0098 – Amendment to land description

MOD 3: 05_0098 – Landfill gas supply & Operability study

MOD 4: 05_0098 – Garden Organics Plant Input

MOD 5: 05_0098 – Receipt and processing of Liquid waste comprising liquid organic waste and leachate.

The modification approval 5 was issued in February 2015. No changes to the PA have occurred during this reporting period.

The PA includes a number of conditions for both the planning and operational management of the Site. The conditions specify a requirement for the development of a suite of management plans, monitoring requirements, operational guidelines and reporting requirements.

Schedule 2, Condition C5 of the PA specifies that an AEMR be produced for the Site and submitted to the NSW EPA, Council and the Department of Planning. This AEMR has been produced to satisfy Schedule 2, Condition C5 of the PA. The specific requirements listed for inclusion in the AEMR are further described in Section 3.3 below.

The PA also includes a requirement for an Independent Environmental Audit to be completed for the Site 'within 1 year of the date of approval to Modification 5, and every 3 years thereafter'. To date one such Audit has been completed (AECOM 2017) and this document was reviewed as part of the preparation of this AEMR. It should be noted that the Independent Environmental Audit is separate to the AEMR and the completion of this AEMR does not further satisfy Schedule 2, Condition C3 of the PA. The findings of the IEA and the follow up actions undertaken by Suez are summarised in Section 4 of this AEMR.

3.3 AEMR Reporting Requirements

This AEMR has been developed as per Schedule 2, Condition C5 (Modification 5, 16 February 2015) of the PA. The condition states 'Within 1 year of the date of approval to Modification 5, and every year thereafter, the Proponent shall review the environmental performance of the project'.

The specific Schedule 2, Condition C5 requirements and references to the section of the AEMR are presented in *Table 3.1* below:

Table 3.1 PA (Modification 5) Schedule 2, Condition C5 Requirements

Condition Requirement	AEMR Section
(a) describe the operations that were carried out in the previous calendar year, and the operations that are proposed to be carried out over the next year;	Section 5.2
(b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of the results against the:	Section 9, Section 6.1, Appendixes I, J and K
(i) the relevant statutory requirements, limits or performance measures / criteria;	Section 8
(ii) requirements of any plan or program required under this approval;	Section 7
(iii) the monitoring results of previous years; and	Section 9
(iv) the relevant predictions in the Environmental Assessment (EA).	Section 3.4
(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;	Section 1, Section 9.4 Appendix A
(d) identify any trends in the monitoring data over the life of the project;	Section 9
(e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and	Section 9
(f) describe what measures will be implemented over the next year to improve the environmental performance of the project.	Section 5.3

3.4 Environmental Assessment (WSN Environmental Solutions 2006)

As part of the planning of the Spring Farm ARRF, an Environmental Assessment (EA) was completed by WSN Environmental Solutions (2006). The EA included various reviews of the potential environmental impact of the Site based on certain environmental parameters (noise, dust, odour etc.). These reviews were used to make predictions as to whether the operation of the Site would have any adverse or unacceptable environmental effects.

The key predictions of the EA are as follows:

- The Site will not impact on any threatened or endangered flora and/or fauna species and no significant impacts to locally or regionally significant native vegetation and flora are expected to occur as a result of the proposed project expected to occur;
- Odour at the facility will not significantly impact surrounding residences;
- Dust will be mitigated such that the Site will not generate significant dust levels;
- The facility operating at full capacity under neutral weather conditions will not exceed the relevant noise criteria at residences in proximity to the site;

- Traffic flows on the surrounding road network is likely to be reduced in the long term, through the construction of the proposed arterial road linking Spring Farm to the Camden Bypass; and
- The potential visual impact of the facility would be insignificant on vistas within the visual catchment and the planned Spring Farm residential area would be screened by a buffer zone.

The assessment criteria which has been adopted to screen the data collected during the reporting period (refer to *Section 8*) is largely aimed at verifying the key predictions made during the EA. Exceedances of the assessment criteria may indicate that either the predictions of the EA were not accurate, or the Site is not being operated within the requirements of the Statement of Commitments which was relied during the EA to make predictions.

4. ACTIONS REQUIRED FROM PREVIOUS IEA

Condition C3 of the PA requires an Independent Environmental Audit (IEA) within one year of the date of approval to Modification 5 (12 December 2015) and every three years thereafter. The most recent IEA was completed by AECOM in 2017, which included a Site inspection and interview on the 21 and 22 March 2017 a NSW DP&E approved Auditor from AECOM. A summary of the Audit findings is presented in *Table 4.1*.

Table 4.1 Summary of Compliance (AECOM, 2017)

Relevant Approval	No. of Conditions Compliant	No. of Conditions Non-Compliant	No. of Conditions Not Verified
Project Approval 05_0098	17	14	4
EPL 12588	21	2	3

Of the sixteen non-compliances, six were considered medium risk, six were considered low risk and four were considered to be administrative non-compliances (AECOM, 2017).

Information provided by SUEZ indicates that the corrective actions for all but one of the non-compliances reported in the IEA have been completed. The remaining non-compliance is associated with a modification to the hours in Conditions 2.14 and 2.15 which permit the receipt of waste.

5. SITE MANAGEMENT

5.1 Site Description

The Site is located approximately 5km south west of Campbelltown within the Camden Local Government Area (LGA) in the Macarthur region of Sydney.

The Site forms part of the larger SUEZ Spring Farm Resource Recovery Park, which includes a former landfill (Jacks Gully Landfill), weighbridge and Materials Recycling Facility (MRF). The adjacent landfill ceased accepting waste in May 2016, however the MRF remains active. The ARRF is constructed on an engineered platform, at the south-western edge of the adjacent former landfill. The facility includes a waste receival and processing hall, organics composting plant, first flush storm water system and a number of above ground tanks (ASTs) for storage and treatment of liquids within a bunded tank farm area. The larger Resource Recovery Park covers approximately 36 hectares, with the ARRF (the Site) covering approximately 2.7 hectares.

The Site layout is presented in *Figure 2, Appendix B*.

5.2 Site Operations Overview

The Site is licenced under the EPL and/or PA to receive and process the following quantities of various waste streams as follows:

- <130,000 tonnes (t) per annum of General Solid Waste (GSW) (putrescible and non-putrescible);
- <25,000t per annum of Garden Waste.
- <5,000t per annum of Organic Waste; and
- <520m³ per day of Liquid Waste comprising liquid organic waste and leachate.

The Site is currently licenced to operate within the hours of 0600 and 1800. The GSW waste stream is through domestic waste collection, which is passed through the ARRT transfer station and then transported directly to SUEZ landfills, including Elizabeth Drive Landfill and Lucas Heights Landfill.

Garden and organic waste was also sourced through domestic streams during the reporting period until 31 July 2019, at which point the Site ceased receiving garden and organic waste. The waste was shredded and biodegraded into a compost product through use of Advanced Resource Recovery Technology (ARRT). The purpose of this process was to divert waste from landfill. The principle of the ARRT is the utilisation microbial activity within a number of composting tunnels for the conversion of biodegradable waste materials into a compost product. The system included a bio filter for odour management purposes. The core of the system was a bio-mechanical pre-processing and co-composting device, which accomplishes size reduction, homogenisation, microbial acclimation/colonisation and bio-mechanical separation of non-digestible materials. The compost was then transported offsite for beneficial use.

Liquid waste is currently accepted in the form of leachate from various SUEZ facilities in NSW, including Elizabeth Drive Landfill, Eastern Creek Organics, Lucas Heights Organics, Raymond Terrace ARRF, Kemps Creek SAWT and Auburn Waste Transfer Station. The leachate is stored in above ground storage tanks and undergoes solids removal and biological treatment. The solids are then disposed of at SUEZ landfills and the remaining liquids are biologically treated and transported offsite to either Transpacific Industries Lidcombe or Waste Assets Management Corporation (WAMC) Eastern Creek Waste Management Centre, both licensed liquid waste facilities for disposal.

The Site is also licenced for the generation of 2 megawatt hours (MWh) of green electricity to export to the grid through biological treatment of the organic component to produce "biogas". ERM understands that the gas engines which were previously present onsite to produce this energy have since been removed to another SUEZ facility.

ERM was informed by SUEZ of one change in operation during the 2018/2019 reporting period. In July 2019, SUEZ stopped processing green waste on site and commenced a proposed trial of processing mixed glass.

The Site currently maintains a stock of chemicals which are used for various purposes during routine Site operations. Of note are the quantities of chemicals which are used in the treatment of liquid waste including coagulants (~5kL), flocculent copolymers (~4kL), ferric chloride (~25kL), sodium hydroxide (~1kL) and magnesium hydroxide (~4kL). These chemicals are stored in above ground storage tanks in the tank farm.

ERM is not aware of any plans to significantly modify the operations described above in the 2019-2020 annual period.

5.3 Site Improvements

Improvements at the Site have been completed in previous reporting years for environmental compliance and performance. During the reporting period, the green waste receival bay enclosure and processing facilities were decommissioned and removed from Site operations. This area of the Site has now been repurposed as a glass proof of performance facility.

5.4 Leachate Management

The Site activities generate insignificant volumes of leachate through the transfer station. Leachate is accepted at the Site as liquid waste from a number of SUEZ waste management and treated in bunded holding tanks. Any leachate which is generated at the transfer station or during the composting process is captured and stored along with any leachate imported to the Site from other sites as liquid waste.

The leachate at the Site is treated with ferric chloride and flocculent to separate any solids from the liquid. The solids are then disposed of at SUEZ landfills and the remaining liquids are biologically treated prior to transport offsite to licensed liquid waste facilities for disposal.

5.5 Storm Water Management

The primary objective of managing and monitoring the water on site is to reduce any potential impacts of the facility to the surrounding water courses or groundwater. SUEZ manages water on site in accordance with the Water Management Standard Operating Procedure (SOP). It is noted that the EA (GHD (2006) predicted that the *'operation of the AWT Facility will have a negligible or positive impact on storm water quality'*.

Roof runoff is diverted to the onsite water storage tanks and this is used for cleaning the facility and wash down areas. The facility utilises a "first flush" system which captures the first 10mm of rain fall in a holding tank to reduce the potential for any contaminants present on hard stand areas to migrate off-site. All storm water from paved areas is directed primarily to the first flush tank. Stormwater additional to the first 10mm of rainfall is freely discharged. The Tank levels are monitored and environmental testing of the first flush water is undertaken. Captured storm water is added to waste liquid storage tanks and removed from Site as liquid waste.

5.6 Vegetation Management

The Site is largely sealed by concrete and minimal vegetation exists within the Site boundary. The Site undertakes a program of noxious weed control under the Vegetation Management Plan (VMP). Under the VMP significant weed growth is to be controlled through the combination of physical removal and the application of biodegradable herbicides. The VMP lists a number of target species which are specific to the area which are controlled as a priority. Vegetation at the Site is inspected monthly as part of routine Site inspections.

5.7 Odour Management

SUEZ has developed an Odour Management Plan (OMP) based on a request from the NSW EPA. The OMP is included in *Appendix H*. The OMP identifies a number of odour sources at the Site, as well as the broader SUEZ Resource Recovery Park and specifies mitigation measures to reduce the impact of these sources. The OMP specifies the following odour monitoring and inspection of control mechanisms to be conducted by SUEZ, which aims to ensure that odour controls are effective. Although the odour monitoring program is conducted to cover the larger SUEZ Spring Farm Resource Recovery Park, if odour is detected efforts are made to determine the specific source of odour.

The EA (GHD 2006) undertook modelling to assess the Sites potential impact on offsite areas from an odour perspective and concluded that the Site would be unlikely to emit odours which are detectable at offsite residential areas.

5.8 Surrounding Land Uses and Receptors

Adjacent and sensitive land uses in the vicinity of the site are detailed in Tables 5.1 and Table 5.2 below.

Table 5.1 Adjacent Land Use

Direction	Distance from Site boundary	Land Use
North	Adjacent	SUEZ operated Landfill (former Jacks Gully Landfill)
East	Adjacent	Bushland
South	Adjacent	Coal Preparation Plant
West	Adjacent	New housing development

Table 5.2 Nearest Sensitive Land Use

Direction	Distance from Site boundary	Sensitive land use
North	> 600m	William Howe Regional Park and Narellan Vale
South	>2000m	Residential – Menangle Park
East	>1,400m	Residential - Mount Annan
West	220m	Jacks Gully Creek and Nepean River

5.9 Geology

The Wollongong - Port Hacking 1:100 000 Geological Sheet (Stroud et al. 1985) refers to the geology beneath the Site as 'unnamed sandstone member, fine to medium grained quartz-lithic sandstone'. According to subsurface investigations undertaken by Douglas Partners (1997) on the adjacent SUEZ Jacks Gully Landfill, the local geology consists of high strength and slightly fractured shales and fine grained sandstones, typical of those encountered regionally within the Bringelly Shale.

5.10 Hydrogeology

There are currently no groundwater monitoring wells installed at the Site and groundwater has not historically been assessed at the Site. However, groundwater data from bores present on the adjacent SUEZ Jacks Gully Landfill site indicate that a shallow sand water bearing zone exists in the north west portion of the Site, which is perched above the extensive underlying Bringelly Shale (Douglas Partners, 1999). Water level measurements indicate there is no hydraulic connection between the perched sand aquifer and the deeper aquifer within the shale (Douglas Partners, 1999).

Groundwater velocities at the adjacent landfill site were estimated by Douglas Partners (1999) to be minimal (1 metre/year). The groundwater flow direction at the Site has not been confirmed, however is likely to flow to the nearest significant surface water body, which is located to the south west towards the Nepean River (Douglas Partners, 1999).

5.11 Local Climate

Meteorological data for the Site was obtained from the weather station located on site. Data collected during the 2018/2019 annual monitoring period, including temperature, wind speed, humidity and precipitation is included in *Appendix G*.

According to the onsite weather station, during the 2018/2019 recorded period, the minimum and maximum recorded average daily temperatures at the site were 7.9 degrees Celsius (°C) (22 June 2019) and 29.4 °C (19 January 2018) respectively. The annual rain total was 634.8 mm from 10 October 2018 – 9 October 2019 with the maximum daily rainfall recorded on 14 December 2018 (37.6 mm).

6. COMPLAINTS AND ENVIRONMENTAL INCIDENTS

6.1 Complaints

SUEZ maintains a register of all complaints received through the SUEZ Integrated Management System (SIMS). The register of data maintained in the SIMS, as well as SUEZ documentation of detailing each complaint is presented in *Appendix F*. A total of thirteen community complaints and one NSW EPA observation were logged during the reporting period, all of which concerned odour. SUEZ conducted investigations of each complaint, including review of current site operations and neighbouring operations, odour investigations and weather data review. According to SUEZ the findings of the investigations were communicated to the NSW EPA.

EPA officers conducted an odour survey on-site and at several offsite locations on 19 February 2019, following odour complaints alleging that the Site was the source of odour. EPA officers detected odour at the green waste receival bay enclosure, similar to offsite odours which the officers detected. Following, EPA issued notice to vary the licence (EPL_12588) on 7 June 2019, relating to the green waste receival bay enclosure, however during this period SUEZ reviewed the operational requirements of the business and stopped processing green waste onsite in early July 2019.

The community complaints received were likely related to odours sourced from the green waste bays. Following the removal of green waste processing from Site operations, no further odour complaints were received.

6.2 Environmental Incidents

According to SUEZ, there have not been any events which were defined as environmental incidents since the Site establishment. The PA refers to an incident as an event which 'has caused, or threatens to cause, material harm to the environment'. Based on information provided to ERM by SUEZ, no such event occurred at the Site or as a result of Site activities during the 2018/19 reporting period.

Although not considered an environmental incident by SUEZ, two minor smoulders occurred within green waste stockpiles which were being stored at the Site and one small fire occurred in the ARRT dry waste area. The two smoulders occurred on the 29 January 2019 and 28 May 2019, resulting from spontaneous combustion (e.g. self-heating). SUEZ staff removed the smouldering section of stockpile and doused with water.

7. MONITORING PROGRAM

7.1 Roles and Responsibilities

Table 7.1 below identifies the roles and responsibilities of all parties involved in the implementation of the environmental monitoring requirements.

Table 7.1 Roles and Responsibilities

Role	Responsible Party for Monitoring
Authority	NSW EPA/ Department of Planning and Environment
Dust Monitoring	SUEZ
Noise Monitoring	Hibbs and Associates Pty Ltd
Odour Monitoring	SUEZ
AEMR Preparation	ERM Australia Pty Ltd

Note that ERM has not been responsible for the collection of any of the monitoring data which has been included in this report. All data was provided by SUEZ and therefore ERM is unable to comment on the appropriateness of sample collection, storage and transport techniques. Laboratory analysis for dust samples is conducted by ALS Laboratories, which is a NATA accredited laboratory.

7.2 Noise

Noise limits for the Site are prescribed in the EPL for a number of receptor locations. The EPL specifies that the noise limits apply at “all existing and proposed residences including Glenlee House”. Although the EPL does not specify a frequency for noise monitoring to be undertaken, condition 3.6 of the Project Approval (PA) (05_0098) requires the noise monitoring be conducted “*within 90 days of the commencement of operations associated with the development, and annually thereafter*”. Both the PA and the EPL note that “*where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy)*”.

Hibbs and Associates Pty Ltd were engaged to conduct the 2019 noise assessment at the Site. Hibbs and Associates completed direct noise measurements on 7 May 2019. The Hibbs and Associates report on the noise assessment is included in *Appendix L*.

7.3 Dust

The PA states that “the Proponent shall design, construct, operate and maintain the project in a manner that prevents and/or minimises dust emissions from the site”. The EPL does not include a specific requirement for dust monitoring to be undertaken, but does state that ‘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’.

In order to demonstrate that dust is not being generated at the Site at unacceptable levels, air quality monitoring is conducted at the Site through the measurement of particulates (deposited matter) through depositional dust gauges (DDGs). Three DDG locations are installed at the Site and dust samples are analysed by ALS Laboratories (a NATA accredited laboratory).

During the 2018/2019 monitoring period, the dust gauge sampling periods were as follows:

- 1 September 2018 – 1 November 2018;
- 2 November 2018 – 31 January 2019;

- 1 February 2019 – 19 March 2019;
- 19 March 2019 – 6 June 2019;
- 7 June 2019 – 4 August 2019; and
- 5 August – 3 October 2019.

Although the DDG samples are left in place for up to three months, the results are reported as g/m²/month by a calculation completed by the laboratory.

7.4 Odour

SUEZ conducts the following odour monitoring program as per the OMP:

- weekly checklist of controls on potential odour sources;
- weekly odour assessment on bio filter and dewatering operations; and
- weekly odour tours on and off-site in surrounding areas conducted to determine if potential odour sources are leaving the Site, including the following offsite locations which are in proximity to sensitive residential receptors:
 - Waterford Drive, Narellan Vale;
 - Welling Drive, Mt Annan;
 - Mt Annan Drive, Mt Annan;
 - Commelina Drive, Caley Drive;
 - Moyengully, Mt Annan;
 - Camden Bypass, Elderslie;
 - Richardson Road, Spring Farm; and
 - River Side, Spring Farm.

The weekly odour monitoring is included in *Appendix J*.

7.5 Storm Water

The first 10mm of rain during any rainfall event is captured by the Sites first flush system. This captured water is sampled for quality monitoring purposes. Storm water samples are analysed for pH, conductivity, total suspended solids (TSS), ammonia and oil and grease.

During this reporting period three samples of the storm water captured by the first flush system were taken on 2 November 2018, 18 December 2018, 19 March 2019, 7 June 2019 and 5 August 2019.

8. ASSESSMENT CRITERIA

8.1 Site Operation Limits - Waste Acceptance

The Site is licenced under the EPL and approved under condition 2.9 of the PA to receive and process the following quantities of various waste streams as follows:

- <130,000 tonnes (t) per annum of General Solid Waste (GSW) (putrescible and non-putrescible);
- <25,000t per annum of Garden Waste.
- <5,000t per annum of Organic Waste; and
- <520m³ per day of Liquid Waste comprising liquid organic waste and leachate (after 1 April 2016).

8.2 Noise Limits

Noise limits for the Site are included in both the EPL and the PA. The limits are identical across both documents and state that noise generated at the Site must remain below the limits which are summarised below in Table 8.1.

Table 8.1 Noise Limits for Spring Farm ARRF

Location	Day	Evening	Night	
	LAeq (15 minute) dB (A)	LAeq (15 minute) dB (A)	LAeq (15 minute) dB (A)	LA1 (1 minute)
All existing and proposed residences including Glenlee House	39	39	35	45

8.3 Dust

The EPL does not specify any specific dust assessment criteria but states that “all operations occurring at the premises must be carried out in a manner that will minimise the emissions of dust from the premises.” The NSW EPA (2016) Approved Method for the Modelling and Assessment of Air Pollutants in New South Wales specify an annual target of an average of 4.0 g/m²/month for total insoluble matter. Since the intention of the NSW EPA (2016) criteria is to be measured over an annual period, a rolling annual average is calculated and screened against the NSW EPA (2016) guideline.

8.4 Odour

The EPL and PA do not specify any specific odour assessment criteria, however the EPL does refer to Section 129 of the POEO Act 1997: ‘the licensee must not cause or permit the emission of any offensive odour from the premises’. The EPL goes on to state that the emission of an offensive odour is defensible if the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

The weekly checklist of potential odour source controls at the Site as well as odour sources included in the OMP are designed to ensure that the required odour minimisation controls are in place and effective. The OMP does not specify any specific thresholds, rather actions to be taken under the following conditions:

- if during the weekly checklist for inspections of controls are not in place as required by the OMP, then the controls are to be reinstated as soon as practicable.
- if odours are detected during the weekly offsite odour tour, then the controls onsite are to be reviewed for effectiveness.

8.5 Storm Water

Although stormwater is able to be discharged freely, the first 10mm of rainfall must be captured by the first flush system. Captured storm water is treated as liquid waste and removed from Site to facilities licenced to process liquid waste. The data collected is used as reference for the quality of the waste liquids for the receiving facilities.

9. RESULTS

9.1 Site Operation Limits – Waste Acceptance

SUEZ has provided data for the material accepted by the Site under various waste streams. The annual data provided to ERM by SUEZ is included in *Table 9.1* below.

Table 9.1 Production Summary

Material	Approved limit (EPL & PA)	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
General Solid Waste	<130,000 tpa	104,206.04 tpa	108,525.14 tpa	~105,000.00 tpa
Garden Waste	<25,000 tpa	13,667.81 tpa	14,982.44 tpa	0 tpa
Organic Waste	<5,000 tpa	0	0	<5,000 tpa
Liquid Waste (comprising liquid organic waste and leachate)	<520 m ³ /d	3,885.7 tpa (<520 m ³ /d)	17,587.8 tpa (<520 m ³ /d)	TBA (<permissible quantities)

The data provided by SUEZ indicates that the volumes and solid waste and green waste were under the EPL limits for the reporting period. As the volumes of liquid waste permitted were presented as an annual period rather than a per day volume as per the EPL conditions, ERM could not confirm that the conditions were complied with every day of the reporting period, however SUEZ has indicated that the limits were not exceeded.

9.2 Noise

A noise assessment was completed in 2019 by Hibbs and Associates Pty Ltd. The Hibbs and Associates report on the noise assessment is included in *Appendix L*. Direct noise measurements at noise sensitive receptors (NSRs) downwind of the ARRF were undertaken. Although the survey results measured noise levels in exceedance of the EPL and PA, it was reported that a traffic source was predicted for the background noise level and that no sounds heard were attributable conclusively to the ARRF operation.

The report stated that the results of the noise survey show that direct measurements at NSRs cannot evaluate the noise emission performance of the ARRF, thus confirming that the approach of the noise modelling assessment (*'Direct measurement at alternative or intermediate location/s'* as described in Section 7.1.1 of the Noise Policy for Industry) is the proper and robust approach for this situation. The model predicted that noise emissions were below the noise limits contained within the PA and EPL.

Although the model sourced data specific to the 2017/2018 monitoring period, Hibbs and Associates conducted noise surveys to validate the model during the reporting period in April 2019. Given that the Site operations at the time of assessment were similar during the reporting period to those by Hibbs and Associates assessed as complying with EPL limits and the lack of noise complaints during the monitoring period, it is not expected that any significant noise issues exist at the Site. Subsequent noise assessments should take into consideration any site operation changes.

The data and conclusions of the noise monitoring report by Hibbs and Associates suggests generally similar noise impacts in comparison to the previous year monitoring period.

9.3 Dust

The available dust monitoring laboratory analytical results as collected and provided to ERM by SUEZ and summary table for the reporting period are included in *Table I.1, Appendix I*.

The data presented in *Appendix I* includes both the monthly average values and rolling annual average values for particulates – total insoluble matter, with comparisons to the NSW EPA (2016) Annual Target Average. There were no reported exceedances of the screening criteria (annual average value (4 g/m²/ month)) for the Site.

Given the consistently low dust results for the twelve months monitored during reporting period and historically, the data is considered sufficient to demonstrate compliance with condition 2.2 of the PA (*The Proponent shall design, construct, operate and maintain the project in a manner that prevents and/or minimises dust emissions from the Site*).

The results were considered consistent with monitoring data from previous reporting periods and do not identify a trend in increasing dust reported.

9.4 Odour

The odour monitoring results from the reporting period are included in *Appendix H*. Throughout this period there were 31 odour monitoring patrols conducted both at the site entrance and at off-site locations with patrols commencing on 10 October 2018. Odour patrols were not completed during 28 weeks where monitoring was required during the reporting period, including week beginning 19 November 2018, 26 November 2018, 24 December 2018, 31 December 2018, 7 January 2019, 11 March 2019, 22 April, 6 May, 13 May, and 27 May through to 9 October 2019.

No off-site odours which were suspected to be directly attributed to the operation of the Site were reported during the odour monitoring conducted by Suez. On occasion organic and “earthy” odours were noted offsite at Mt Anan Drive, William Howe regional Park, Commelina Drive and Blackgum Road, however these were not attributed to the Site operations at the time of monitoring. These observations are generally consistent with monitoring data from previous reporting periods and are consistent with the predictions made in the EA (GHD (2006)).

EPA officers conducted an odour survey on-site and at several offsite locations on 19 February 2019, following odour complaints alleging that the Site was the source of odour. EPA officers detected odour at the green waste receival bay enclosure, similar to offsite odours which the officers detected.

Although odour monitoring patrol conducted did not identify off-site odours which were suspected to be directly attributed to the operation of the Site, patrols were only conducted at approximately half the required frequency. The odour survey conducted by the EPA did indicate the unacceptable odours were being generated and furthermore 13 odour complaints were received during the reporting period. Therefore it appears that the site was likely to have emitted offensive odours at times and therefore was not compliant with PA Condition 2.1 at times during the reporting period. It is suggested that odour boundary monitoring is considered to assist in detection and identification of any potential odours from the Site. Despite this, given that the source of the odours (green waste processing) has now been removed from the Sites operations and the odours appear to have ceased. Therefore no further corrective action is required.

9.5 Storm Water

Three samples of the storm water captured by the first flush system were taken on 2 November 2018, 18 December 2018, 19 March 2019, 7 June 2019 and 5 August 2019. The results of the sample indicated the presence of elevated levels of TSS and minor concentrations ammonia. Oil and grease were detected in two of the samples. The laboratory certificates of analysis for the first flush system sampling is included in *Appendix K*.

Given that the water captured by the first flush system is generally disposed of offsite as liquid waste, no further assessment of these results is required.

10. CONCLUSIONS

This AEMR has been developed to satisfy the reporting requirements of Schedule 2, Condition C5 – Annual Reporting of the Sites PA (Modification 5, 16 February 2015) (application number 05_0098) for the 2018-2019 monitoring period (10 October 2018 to 9 October 2019). The AEMR has assessed all available data collected from the environmental monitoring program during the reporting period and assessed the Site's overall environmental performance and compliance with the EPL and the PA. The available data has been collected to satisfy EPL and PA requirements and is generally sufficient to satisfy the PA and EPL requirements for the reporting period.

An Independent Environmental Audit was completed for the Site in 2017 which raised a number of compliance issues for the Site and made recommendations to SUEZ to address those issues. A summary of these compliance issues and an update of their status has been provided.

A noise assessment was completed in 2019 by Hibbs and Associates Pty Ltd. The model sourced data specific to the 2017/2018 monitoring period, however Hibbs and Associates conducted noise surveys to validate the model during the reporting period in April 2019. Given that the Site operations were similar at the time of assessment to those by Hibbs and Associates assessed as complying with EPL limits and the lack of noise complaints during the monitoring period, it is not expected that any significant noise issues exist at the Site.

Dust was monitored by SUEZ at the Site during the reporting period at three locations. The annual rolling average was below the relevant guidelines during monitoring period, indicating that the Site is managing dust generation appropriately.

Odour monitoring rounds did not identify off-site odours which were suspected to be directly attributed to the operation of the Site, however an odour survey conducted by the EPA and a number of odour complaints received during the reporting period, indicates that the site generated unacceptable odour.

EPA issued notice to vary the licence (EPL_12588) on 7 June 2019, relating to the green waste receival bay enclosure, however during this period SUEZ reviewed the operational requirements of the business and stopped processing green waste onsite in early July 2019, and design of modifications to the green waste receival bay enclosure commenced,

Based on the completion of this AEMR, ERM considers that the Site is compliant with Schedule 2, Condition C5 – Annual Reporting of the Sites PA (application number 05_0098, modification 5, 16 February 2015) for the period 10 October 2018 to 9 October 2019. Based on information provided by SUEZ, the Site is generally compliant with the PA and EPL, with the single non-compliance reported being against Condition 2.1 relating to odour based on issues with odour at the green waste processing area. Given that the cause of the non-compliance (green waste processing) has now been removed from the Sites operations, this non-conformance is considered rectified and no further corrective action is required.

11. STATEMENT OF LIMITATIONS

1. This report is based solely on the scope of work described in the Specification and ERM proposal P0539225 and performed by ERM for SUEZ Recycling and Recovery Pty Ltd (the Client). The Scope of Work was governed by a contract between ERM and the Client.
2. No limitation, qualification or caveat set out below is intended to derogate from the rights and obligations of ERM and the Client under the Contract.
3. The findings of this report are solely based on, and the information provided in this report is strictly limited to that required by, the Scope of Work. Except to the extent stated otherwise, in preparing this report ERM has not considered any question, nor provides any information, beyond that required by the Scope of Work.
4. This report was prepared between October 2019 and June 2020 and is based on information reviewed at the time of preparation. The report does not, and cannot, take into account changes in law, factual circumstances, applicable regulatory instruments or any other future matter. ERM does not, and will not, provide any on-going advice on the impact of any future matters unless it has agreed with the Client to amend the Scope of Work or has entered into a new engagement to provide a further report.
5. Unless this report expressly states to the contrary, ERM's Scope of Work was limited strictly to identifying typical environmental conditions associated with the subject site(s) and does not evaluate the condition of any structure on the subject site nor any other issues. Although normal standards of professional practice have been applied, the absence of any identified hazardous or toxic materials or any identified impacted soil or groundwater on the site(s) should not be interpreted as a guarantee that such materials or impacts do not exist.
6. This report is based on correspondence with the client conducted by ERM personnel, the sampling and analyses described in the report, and information provided by the Client or third parties (including regulatory agencies). All conclusions and recommendations made in the report are the professional opinions of the ERM personnel involved. Whilst normal checking of data accuracy was undertaken, except to the extent expressly set out in this report ERM:
 - a. did not, nor was able to, make further enquiries to assess the reliability of the information or independently verify information provided by; and
 - b. assumes no responsibility or liability for errors in data obtained from, the Client, any third parties or external sources (including regulatory agencies).
7. Although the data that has been used in compiling this report is generally based on actual circumstances, if the report refers to hypothetical examples those examples may, or may not, represent actual existing circumstances.
8. Only the environmental conditions and or potential contaminants specifically referred to in this report have been considered. To the extent permitted by law and except as is specifically stated in this report, ERM makes no warranty or representation about:
 - a. the suitability of the site(s) for any purpose or the permissibility of any use;
 - b. the presence, absence or otherwise of any environmental conditions or contaminants at the site(s) or elsewhere; or
 - c. the presence, absence or otherwise of asbestos, asbestos containing materials or any hazardous materials on the site(s).
9. Use of the site for any purpose may require planning and other approvals and, in some cases, environmental regulator and accredited site auditor approvals. ERM offers no opinion as to the likelihood of obtaining any such approvals, or the conditions and obligations which such approvals may impose, which may include the requirement for additional environment works.

10. The ongoing use of the site or use of the site for a different purpose may require the management of or remediation of site conditions, such as contamination and other conditions, including but not limited to conditions referred to in this report.
11. This report should be read in full and no excerpts are to be taken as representative of the whole report. To ensure its contextual integrity, the report is not to be copied, distributed or referred to in part only. No responsibility or liability is accepted by ERM for use of any part of this report in any other context.
12. Except to the extent that ERM has agreed otherwise with the Client in the Scope of Work or the Contract, this report:
 - a. has been prepared and is intended only for the exclusive use of the Client;
 - b. must not to be relied upon or used by any other party;
 - c. has not been prepared nor is intended for the purpose of advertising, sales, promoting or endorsing any Client interests including raising investment capital, recommending investment decisions, or other publicity purposes;
 - d. does not purport to recommend or induce a decision to make (or not make) any purchase, disposal, investment, divestment, financial commitment or otherwise in or in relation to the site(s); and
 - e. does not purport to provide, nor should be construed as, legal advice.

APPENDIX A TABLE OF COMPLIANCE

Condition No.	Condition / Requirement	Compliance Status	Comment
Specific Environmental Conditions			
Air Quality			
2.1	The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the Protection of the Environment Operations Act 1997.	Non-Compliant	Odour survey conducted by EPA officers and odour complaints recorded during reporting period indicate that the Site generated offensive odours. Note that the odours were generated at the green waste processing facility, which has now been removed from the site operation.
2.2	The Proponent shall design, construct, operate and maintain the project in a manner that prevents and/or minimises dust emissions from the site.	Compliant	SUEZ implements a Standard Operating Procedure 41 Site Maintenance – Infrastructure Facilities which includes dust controls. Air Quality has been monitored throughout the reporting period and results were below appropriate thresholds, indicating that dust generation is being managed appropriately.
2.3	The Proponent shall ensure that all vehicles entering or leaving the site with a load that may generate offensive odours or dust emissions are covered at all times.	Compliant	SUEZ receives waste in enclosed garbage trucks. Waste and processed organics from the GOP are transported in covered trailers. The Site has signage which states that truck loads must be covered.
Stormwater Management			
2.4	The Proponent shall ensure that all areas involving the handling, treatment or storage of waste and outputs must be sealed, with all runoff directed to a first flush system.	Compliant	Refer to the Standard Operating Procedure 69 – Water Management
2.5	The proponent shall construct bunds to ensure that above-ground tanks and vats including those used for treating or processing waste/water slurry and tanks for storing wastewater from these activities, are surrounded with a bund with a capacity of 110% or greater than that of the largest tank within the bund. Areas to be bunded include: a) the AWT process building and tank farm; and b) the perimeter of the AWT site.	Compliant	Refer to the Standard Operating Procedure 69 – Water Management

Condition No.	Condition / Requirement	Compliance Status	Comment
Wastewater Management			
2.6	The Proponent shall ensure that process wastewater from the ArrowBio plant is kept separate from the stormwater management system and is stored in a reservoir or tank engineered and designed in accordance with the requirements of the EPA's (1999) Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes.	N/A	The ArrowBio plant was decommissioned in 2012/13.
2.7	Prior to the irrigation or reuse of process wastewater from the ArrowBio plant on or off site, the Proponent shall provide evidence, to the satisfaction of the Secretary, that the EPA is satisfied with the standard of the wastewater for its intended application. Irrigation or reuse of process wastewater shall not commence until written approval has been provided by the Secretary. This condition does not apply to any wastewater intended to be reused in the process as makeup water.	N/A	The ArrowBio plant was decommissioned in 2012/13.
Waste Management			
2.8	The Proponent shall not cause, permit or allow any materials or waste generated outside the site to be received at the site for storage, resource recovery, processing, or disposal on the site, except as expressly permitted by an EPL.	Complaint	Waste was received in accordance with the Sites EPL
2.9	The Proponent shall not receive or process on the site more than: a) 130,000 tonnes per year of General Solid Waste; b) 25,000 tonnes per year of Garden Waste; c) 5,000 tonnes per year of Organic Waste; and d) 520m3 per day of Liquid Waste comprising liquid organic waste and leachate.	Compliant	Volumes of waste received were under the permissible quantities

Condition No.	Condition / Requirement	Compliance Status	Comment
2.10	<p>Prior to applying any organic outputs to land, the Proponent shall fully characterise the organic outputs to be applied to land with supporting laboratory analysis and propose an appropriate specification to ensure this waste-derived material is fit for its intended purpose. AS4454 Composts, soil conditioners and mulches and the EPA's Environmental Guidelines: Use and Disposal of Biosolids Products (1997) shall not be the sole determinants of the suitability (or otherwise) of this material for land application.</p> <p>The characterisation and proposed specification shall be provided to the EPA, and evidence of the EPA's approval shall be provided to the Secretary within two weeks of the approval being granted.</p>	Compliant	Spring Farm Garden Organics facility is operated under Pasteurised Garden Organics Order 2016. Based on the order, it is required to test the "glass, metal and rigid plastics>2mm" and "Plastics – light, flexible or films >5mm". Both tests have been conducted on the Pasteurised Garden Organics produced from Spring Farm facility.
Noise			
2.12	<p>The Proponent shall undertake all construction activities associated with the development that would generate an audible noise at any premises beyond the boundary of the site between the following hours:</p> <p>a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;</p> <p>b) 8:00 am to 1:00 pm, Saturdays; and</p> <p>c) at no time on Sundays or public holidays unless otherwise approved in writing by the Secretary.</p>	N/A	No construction activities are occurring at the Site
2.13	<p>The Proponent shall ensure that noise from the project at all existing and proposed residences, including Glenlee House, does not exceed:</p> <p>a) a LAeq (15 minute) noise emission criterion of 39 dB(A) during the day/evening;</p> <p>b) a LAeq (15 minute) noise emission criterion of 35 dB(A) during the night; and</p> <p>c) a LA1 (1 minute) noise emission criterion of 45 dB(A) during the night.</p>	Complaint	Monitoring was attended at Commelina Drive during the reporting period. Noise exceedances were measured, however could not evaluate the noise performance of the ARRF. Noise modelling indicates that the Site does not generate noise exceedances.

Condition No.	Condition / Requirement	Compliance Status	Comment
Transport			
2.14	The Proponent shall ensure that heavy vehicles associated with the project do not enter or exit the site between 10pm and 7am, unless these movements are due to circumstances beyond the control of the Proponent.	Compliant	Vehicles associated with the project do not enter or exit the facility between 10pm and 7am
2.15	Notwithstanding condition 2.14, the Proponent shall ensure that all waste to be processed at the site is received between the following hours: a) 7:00 am to 5:00 pm, Mondays to Fridays, inclusive; b) 8:00 am to 4:00 pm, Saturdays and Sundays; and c) 7:00 am to 2:00 pm on public holidays.	Compliant	SUEZ confirms that no waste was processed outside of the listed hours. A request for modification to this condition was submitted 25 February 2019 and is currently under assessment.
2.16	The Proponent shall take all reasonable steps to inform vehicles carrying waste to/from the development from MACROC Councils to use the following routes: a) Narellan Road, Camden Bypass, Springs Road, Richardson Road and the current right of way, when accessing the site from the north or east; and/or b) Old Hume Highway, Camden Bypass, Springs Road, Richardson Road and the current right of way, when accessing the site from the south or west, prior to the finalisation of public access to the proposed arterial road referred to in the documents listed under condition 1.1.	Compliant	Public access way to the proposed arterial roads was completed outside of this reporting period.
2.17	Upon finalisation of public access to the proposed arterial road referred to in the documents listed under condition 1.1, the Proponent shall take all reasonable steps to inform vehicles carrying waste to/from the development from MACROC Councils to use the following routes: a) Narellan Road, Camden Bypass, arterial road and new public road when accessing the site from the north or east; and/or b) Old Hume Highway, Camden Bypass, arterial road and new public road when accessing the site from the south or west.	Compliant	Trucks access the Site via Narellan Road, Camden Bypass, Liz Kemohan Drive, Richardson Road and Springs Road.

Condition No.	Condition / Requirement	Compliance Status	Comment
2.18	Prior to finalisation of public access to the proposed road network referred to in the documents listed under condition 1.1, the Proponent shall pay Council \$13,194 annually for the maintenance of the local roads used by the AWT Facility. However, upon finalisation of public access to the proposed road network, the Proponent shall pay Council \$5,124 annually.	Compliant	Camden Council invoices SUEZ annually.
2.19	Prior to the receipt of waste from non-MACROC Councils, the Proponent shall provide to Council details of vehicle access routes to the site for vehicles carrying waste from non-MACROC Councils. Evidence of consultation with Council shall be provided to the satisfaction of the Secretary.	N/A	
2.20	The Proponent shall ensure that vehicles associated with the project do not park, queue or stand in any of the road reserves outside the site.	Compliant	SUEZ property holds enough space for trucks to queue if required.
Mine Subsidence			
2.21	The Proponent shall ensure that the project is designed to withstand the following mine subsidence parameters: a) Maximum subsidence: 1200mm b) Maximum strains: 1.5mm c) Maximum tilt: 5mm/m d) Radius of curvature: 12000m	Compliant	The project was constructed according to approved plans
Visual			
2.22	The Proponent shall ensure that all external lighting associated with the project: a) does not create a nuisance to surrounding properties or roadways; and b) complies with AS 4282(INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting.	Compliant	The ARRF has street lights and flood lights on the composting tunnels which are triggered by a sensor. No complaints have been received in relation to lighting. No new lighting has been installed during this reporting period.

Condition No.	Condition / Requirement	Compliance Status	Comment
Hazards			
2.23	The Proponent shall ensure that Liquefied Natural Gas is not used at the site.	Compliant	LNG is not used at the Site
2.24	Prior to the commissioning the gas pipeline, the Proponent shall: a) implement the proposed safeguards and actions listed in Appendix A of the HAZOP study report (AECOM, 26 august 2009) b) prepare and implement a Commissioning Procedure; and c) prepare and implement a Safety and Operating Plan (SAOP); for the pipeline based on Australian Standard AS/NZS4645.1-2008- Gas Distribution Networks, Part 1-Network Management to the satisfaction of the Secretary.	N/A	No gas pipeline has been commissioned
2.25	The Proponent shall prepare the studies set out under subsections a) to b) (the pre-construction studies). Construction associated with MOD 5, other than preliminary works that are outside the scope of the hazard studies, shall not commence until the recommendations of the study have been considered and, where appropriate, acted upon: a) a Hazard and Operability Study for MOD 5, chaired by an independent qualified person. The study shall be consistent with the Department's Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'; and b) a Final Hazard Analysis for MOD 5, consistent with the Department's Hazardous Industry Planning Advisory paper No 6 "Hazard Analysis". The document shall be prepared and submitted to the Department no later than one month prior to the commencement of construction of MOD 5 (other than preliminary works), or within such further period as the Secretary may agree.	Compliant	AXYS Consulting has prepared and submitted the following documents to DPE: HAZOP Report for Leachate Treatment, Revision 3, dated 12.04.16 HAZOP Report for High Organic Liquid Treatment, Revision 2, dated 12.04.16 Final Hazard Analysis, Risk Assessment Report, Spring Farm – Tank Farm, Revision 3, dated 12.04.16

Condition No.	Condition / Requirement	Compliance Status	Comment
2.26	<p>The Proponent shall develop and implement the plans and systems set out under subsections a) to b). No later than two months prior to the commencement of commissioning of MOD 5, or within such further period as the Secretary may agree, the Proponent shall submit for the approval of the Secretary documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Secretary.</p> <p>a) the Proponent's Emergency Plan and detailed emergency procedures shall be updated to incorporate any changes due to MOD 5. The plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'; and</p> <p>b) the Proponent's Safety Management System shall be updated to include any changes due to MOD 5. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be developed in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.</p>	Compliant	<p>SUEZ submitted the following documents to DPE for approval dated 15.02.16:</p> <p>Emergency Response Plan – Spring Farm Resource Recovery Park, Version 4, dated 02.01.16</p> <p>Pollution Incident Response Management Plan (PIRMP), Version 6, dated 02.01.16</p> <p>EQS Management System Manual (Safety Management System), Version 2, dated 15.01.16.</p> <p>Approval was received on 26 October 2017.</p>

Condition No.	Condition / Requirement	Compliance Status	Comment
Environmental Management and Monitoring			
Operation Environmental Management Plan			
3.3	<p>Prior to the commencement of operations, the Proponent shall prepare (and following approval implement) an Operation Environmental Management Plan (OEMP) for the project. This plan must describe the environmental management framework, practices and procedures that would be followed during operations, and include:</p> <ul style="list-style-type: none"> a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to operation of the development, including all approvals, licences, approvals and consultations; NSW Government Department of Planning; b) a description of the roles and responsibilities for all relevant employees involved in the operation of the development; c) overall environmental policies, principles and performance measures that will be applied to the operation of the development; and d) the management plans listed under condition 3.4. <p>Operations shall not commence until the Secretary has approved the OEMP.</p>	Compliant	<p>OEMP was updated to include requirements of this condition in February 2018.</p> <p>EMP is available on website.</p> <p>Email sent to the Department on 14 March 2018. Formal approval request email sent 28 June 2017.</p>
3.4	<p>The OEMP for the project shall include the following Management Plans:</p> <ul style="list-style-type: none"> a) a Stormwater Management Plan outlining the measures that would be implemented to manage the stormwater generated by the project. This plan shall be prepared in consultation with the EPA, and include: <ul style="list-style-type: none"> (i) details of the proposed stormwater management system for the project, which must be designed as a first flush system to capture the first 10mm of stormwater for each m² of catchment; and (ii) details of the program for the reuse of captured first flush stormwater, whether as process water in the ArrowBio Plant, as discharge to sewer, or tankering to an off site treatment facility, until such time as the Proponent has demonstrated to the satisfaction of 	Compliant	<p>The EMP was updated in February 2018 to include stormwater management and vegetation management plans. DPE were notified on 14 March 2018.</p>

Condition No.	Condition / Requirement	Compliance Status	Comment
	<p>the EPA that the stormwater is suitable for other management approaches.</p> <p>b) a Vegetation Management Plan outlining the measures that would be implemented to minimise the impacts of the project on surrounding vegetation. This plan must be prepared in consultation with DNR and Council, and include:</p> <p>(i) details of any natural watercourses or riparian areas to be disturbed by the project;</p> <p>(ii) details of the proposed program for the rehabilitation of disturbed areas; and</p> <p>(iii) details of the proposed program for weed control at the site.</p>		
3.4a	The Proponent shall operate a meteorological station on the site that complies with the requirements in the latest version of the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales.	Compliant	<p>Refer to Section 5.11.</p> <p>The weather station is located at</p> <p>Latitude: -34.073505 degrees</p> <p>Longitude: 150.749639 degrees</p>
Odour Monitoring			
3.5	<p>Prior to the commencement of operations associated with the development, the Proponent shall prepare an ongoing odour monitoring program to ensure compliance with condition 2.1 of this approval throughout the life of the development, consistent with Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2005).</p> <p>The Program shall be submitted for the approval of the Secretary and operations shall not commence until written approval has been received from the Secretary.</p>	Compliant	The Odour Management Plan was submitted to the secretary on 29 September 2017.

Condition No.	Condition / Requirement	Compliance Status	Comment
3.5a	The Proponent shall prepare and implement a Standard Operating Procedure (SOP) to control fugitive emissions from the operations of the Garden Organics Plant. the SOP shall be: a) consistent with the existing Environmental Management Plan b) developed in consultation with Council ; and c) submitted to the Secretary for approval within 3 months of approval of Modification 4.	Compliant	A standalone SOP has been developed, included in EMP and submitted to department on 14 March 2018.
3.5b	The Proponent shall carry out an Odour Audit of the Project no later than 6 months after the commencement of operation of the tank farm. The audit must: a) be carried out by a suitably qualified and experienced independent person(s), whose appointment has been endorsed by the Secretary; b) audit the Project in full operation; c) include a summary of odour complaints and any actions that were carried out to address the complaints; d) validate the Project against odour impact predictions in Modification Application 05_0098 MOD 5; e) review design and management practices in the Project against industry best practice for odour management; and f) include an action plan that identifies and prioritises any odour mitigation measures that may be necessary to reduce odour emissions. Note: The odour audit may be prepared so that it addresses the requirements of this consent and the EPL for the Development.	Compliant	An Odour Audit was conducted by Pacific Environment dated 13 July 2018.
3.5c	The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of the Odour Audit.	N/A	No requests for further information have been received from the Department regarding the Odour Audit

Condition No.	Condition / Requirement	Compliance Status	Comment
Noise Monitoring			
3.6	<p>Within 90 days of the commencement of operations associated with the development, and annually thereafter, the Proponent shall assess the noise emission performance of the development during a period in which the development is operating under normal operating conditions. The assessment shall include, but not necessarily be limited to:</p> <p>a) noise monitoring, consistent with the guidelines provided in the New South Wales Industrial Noise Policy (EPA, 2000), to assess compliance with condition 2.13 of this approval;</p> <p>b) a comparison of the results of the noise monitoring required under a) above, and the predicted noise impacts detailed in the documents listed under condition 1.1 of this approval; and</p> <p>c) details of any entries in the Complaints Register (condition 6.3 of this approval) relating to noise impacts.</p> <p>A report providing the results of the program shall be submitted to the Secretary and the EPA within 28 days of completion of the testing required under a).</p>	Compliant	Noise modelling to assess noise emission performance of the development was completed in 2019 by Hibbs and Associates Pty Ltd. Noise monitoring at the Site was undertaken to validate the noise model. No complaints relating to noise impacts were reported.
3.7	<p>If the results of the monitoring required under conditions 3.5 and 3.6 indicate that the operation of any component of the development, when operating under design loads and normal operating conditions, exceeds the limits imposed under conditions 2.1 and/or 2.13 of this approval, the Proponent shall provide details of remedial measures to be implemented and a timetable for implementation to reduce emissions to the levels required.</p> <p>Details of the remedial measures shall be submitted to the Secretary for approval, and be accompanied by evidence that the EPA is satisfied that the remedial measures are acceptable.</p>	N/A	Hibbs and Associates Pty Ltd reported that the results of the assessment show that noise emissions were below the noise limits.

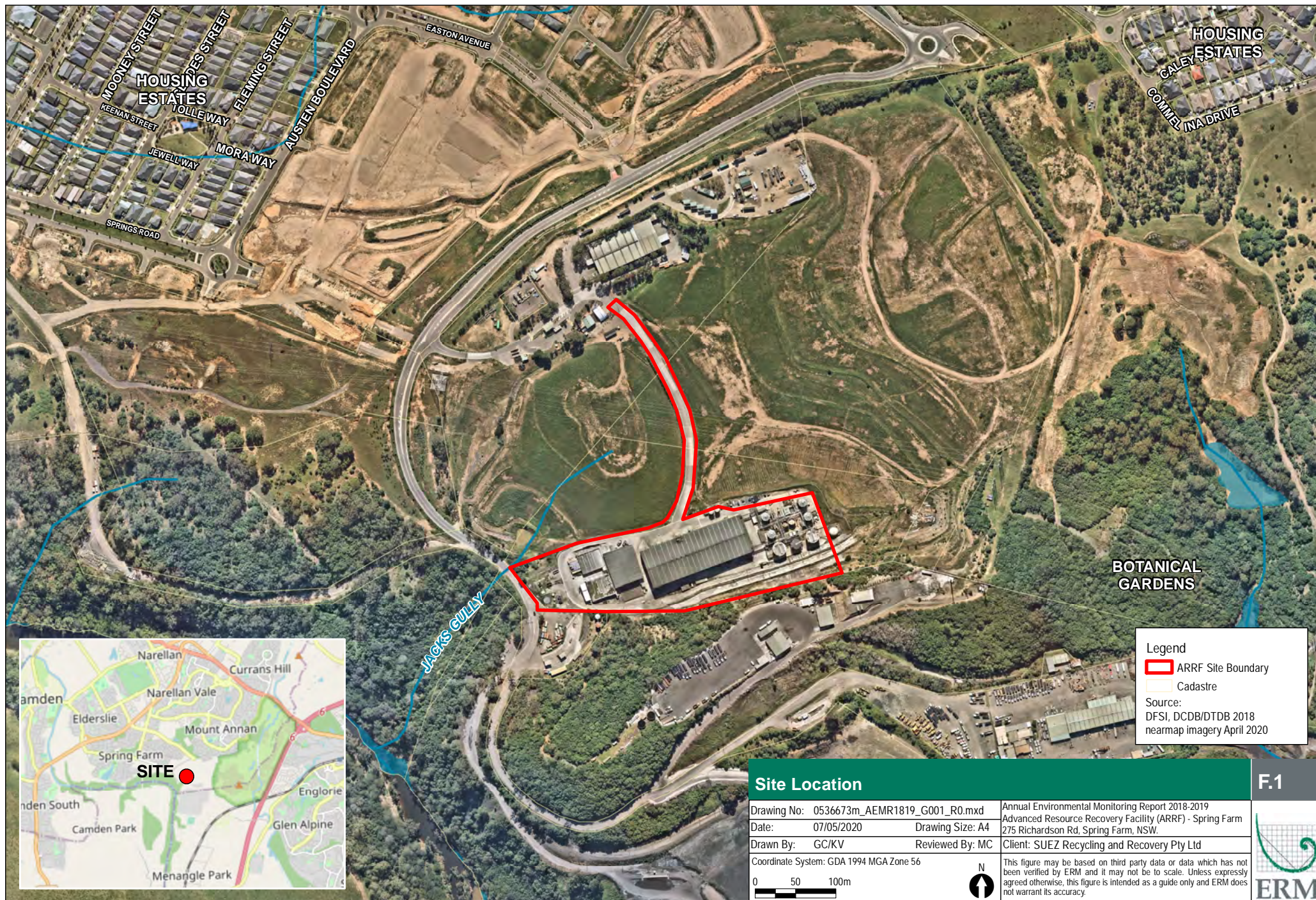
Condition No.	Condition / Requirement	Compliance Status	Comment
Compliance			
4.1	Prior to the commencement of construction and operations, the Proponent shall certify in writing to the satisfaction of the Secretary that it has complied with all the applicable conditions of this approval.	Compliant	No construction activities have been carried out during the reporting period
Reporting, Review and Access to Information			
Incident Reporting			
C1	The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the Project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.	Complaint	No Environmental Incidents occurred within the reporting period.
Regular Reporting			
C2	The Proponent shall provide regular reporting on the environmental performance of the Project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Compliant	Completed AEMR's are available on the SUEZ website

Condition No.	Condition / Requirement	Compliance Status	Comment
Independent Environmental Audit			
C3	<p>Within 1 year of the date of approval to Modification 5, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:</p> <ul style="list-style-type: none"> a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary; b) led by a suitably qualified auditor, and include experts in fields specified by the Secretary; c) include consultation with the relevant agencies; d) assess the environmental performance of the Project and assess whether it is complying with the requirements in this approval, and any other relevant approvals NSW Government Department of Planning and Environment 3 and relevant EPL/s (including any assessment, plan or program required under the approvals); e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy, plan or program required under the approvals. 	Compliant	An Independent Environmental Audit was undertaken in June 2017. The next IEA will be undertaken in 2020.
C4	<p>Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.</p>	Complaint	See Condition C3. No IEA required to be undertaken during the reporting period

Condition No.	Condition / Requirement	Compliance Status	Comment
Annual Review			
C5	<p>Proponent shall review the environmental performance of the Project. This review must:</p> <ul style="list-style-type: none"> a) describe the operations that were carried out in the previous calendar year, and the operations that are proposed to be carried out over the next year; b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of the results against the: <ul style="list-style-type: none"> (i) the relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this approval; (iii) the monitoring results of previous years; and (iv) the relevant predictions in the EA; c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; d) identify any trends in the monitoring data over the life of the Project; e) identify any discrepancies between the predicted and actual impacts of the Project, and analyse the potential cause of any significant discrepancies; and f) describe what measures will be implemented over the next year to improve the environmental performance of the Project. 	Compliant	ERM have assisted Suez in compiling the Annual Review (this document) with information provided by SUEZ.
Revision of strategies, plans and programs			
C6	<p>Within 3 months of the submission of an:</p> <ul style="list-style-type: none"> a) annual review under Condition C5 above; b) incident report under Condition C1 above; c) audit under Condition C3 above; or d) any modification to this consent, <p>the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval.</p>	Compliant	The EMP was updated in February 2018 in response to recommendations made by the IEA and Modification 5.

Condition No.	Condition / Requirement	Compliance Status	Comment
C7	The Proponent shall ensure that the operation of the Project is undertaken in accordance with all relevant updated and/or amended strategies, management plans and programs approved by the Secretary (or as revised and approved by the Secretary), unless otherwise agreed by the Secretary.	Compliant	Notwithstanding minor deviations described in this AEMR, SUEZ manages and monitors the site in accordance with SOP, Management Plans, the project approval and the EPL.
Access to information			
C8	<p>The Proponent shall:</p> <ul style="list-style-type: none"> a) make copies of the following publicly available on its website: <ul style="list-style-type: none"> (i) the documents referred to in Condition 1.1; (ii) all current statutory approvals for the Project; (iii) all approved strategies, plans and programs required under the conditions of this consent; (iv) a comprehensive summary of the monitoring results of the Project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs; (v) a complaints register, updated on a monthly basis; (vi) the annual reviews of the Project; (vii) any independent environmental audit of the Project, and the Proponent's response to the recommendations in any audit; and (viii) any other matter required by the Secretary; and b) keep this information up to date. 	Compliant	Documents required under this condition are available on the SUEZ website

APPENDIX B FIGURES



Site Location

Drawing No: 0536673m_AEMR1819_G001_R0.mxd
Date: 07/05/2020
Drawn By: GC/KV

Annual Environmental Monitoring Report 2018-2019
Advanced Resource Recovery Facility (ARRF) - Spring Farm
275 Richardson Rd, Spring Farm, NSW.
Client: SUEZ Recycling and Recovery Pty Ltd

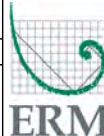
Reviewed By: MC
Coordinate System: GDA 1994 MGA Zone 56

0 50 100m



This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

F.1



ID	Feature
1	Municipal Waste Receival & Processing Hall
2	Composting Plant
3	Bio Filter
4	Water Treatment Tank Farm
5	First Flush Tank

ACCESS ROAD

Legend

- ARRF Site Boundary
- Cadastre
- 1 Feature ID

Source:
DFSI, DCDB/DTDB 2018
nearmap imagery April 2020

Site Features

Drawing No: 0536673m_AEMR1819_G002_R0.mxd
Date: 07/05/2020
Drawn By: GC/KV
Coordinate System: GDA 1994 MGA Zone 56

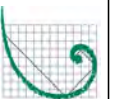
Annual Environmental Monitoring Report 2018-2019
Advanced Resource Recovery Facility (ARRF) - Spring Farm
275 Richardson Rd, Spring Farm, NSW.
Reviewed By: MC
Client: SUEZ Recycling and Recovery Pty Ltd

0 25 50m



This figure may be based on third party data or data which has not been verified by ERM and it may not be to scale. Unless expressly agreed otherwise, this figure is intended as a guide only and ERM does not warrant its accuracy.

F.2



ERM

APPENDIX C PROJECT APPROVAL

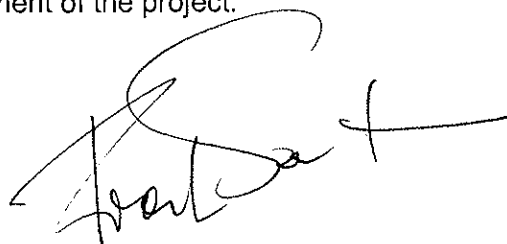
Project Approval

Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the project referred to in Schedule 1, subject to the conditions in Schedule 2.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.



Frank Sartor MP
Minister for Planning

Sydney

7th Sept

2006

File No: S04/00422

SCHEDULE 1

Application No:	05_0098.
Proponent:	WSN Environmental Solutions
Approval Authority:	Minister for Planning
Land:	Lots 2-4 DP 250033, Lot 2 DP 1076817
Project:	Jacks Gully Alternative Waste Technology Facility

KEY TO CONDITIONS

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SCHEDULE 2

Act	<i>Environmental Planning and Assessment Act, 1979.</i>
Construction	Includes any activity requiring a Construction Certificate, significant excavation work, road works, demolition, or any construction related activity as described in Major Projects Application 05_0098.
Council	Camden Council.
DEC	Department of Environment and Conservation.
Department	Department of Planning.
Director-General	Director-General of the Department (or delegate).
EA	<i>Environmental Assessment: Proposed Alternative Waste Technology Facility at Jacks Gully Waste and Recycling Centre</i> (WSN Environmental Solutions, March 2006, Volumes 1 and 2).
EPL	Environment Protection Licence issued under the <i>Protection of the Environment Operations Act 1997</i> .
MACROC	Macarthur Regional Organisation of Councils.
Minister	Minister for Planning.
Operation	Commissioning of any stage of works as described in the Major Projects Application 05_0098.
Proponent	WSN Environmental Solutions, or its successors on title
Publicly Available	Available for inspection by a member of the general public (for example available on an internet site or at a display centre).
Site	Land to which Major Projects Application 05_0098 applies.

1. ADMINISTRATIVE CONDITIONS

Terms of Approval

- 1.1 The Proponent shall carry out the project generally in accordance with the:
 - a) Major Project Application 05_0098, lodged with the Department of Planning on 14 December 2005;
 - b) environmental assessment: *Environmental Assessment: Proposed Alternative Waste Technology Facility at Jacks Gully Waste and Recycling Centre* (WSN Environmental Solutions, March 2006, Volumes 1 and 2);
 - c) the Statement of Commitments, prepared by WSN Environmental Solutions and dated March 2006;
 - d) response to submissions: *Responses to Submissions* prepared by WSN Environmental Solutions, dated 16 June 2006; and
 - e) conditions of this approval.
- 1.2 If there is any inconsistency between the above, the conditions of this approval shall prevail to the extent of the inconsistency.
- 1.3 The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
 - a) any reports, plans or correspondence that are submitted by the Proponent in accordance with this approval; and
 - b) the implementation of any actions or measures contained in those reports, plans or correspondence submitted by the Proponent.

2. SPECIFIC ENVIRONMENTAL CONDITIONS

Air Quality

- 2.1 The Proponent shall not cause or permit the emission of offensive odours from the site, as defined under Section 129 of the *Protection of the Environment Operations Act 1997*.
- 2.2 The Proponent shall design, construct, operate and maintain the project in a manner that prevents and/or minimises dust emissions from the site.
- 2.3 The Proponent shall ensure that all vehicles entering or leaving the site with a load that may generate offensive odours or dust emissions are covered at all times.

Stormwater Management

- 2.4 The Proponent shall ensure that all areas involving the handling, treatment or storage of waste and outputs must be sealed, with all runoff directed to a first flush system.
- 2.5 The proponent shall construct bunds to ensure that above-ground tanks and vats including those used for treating or processing waste/water slurry and tanks for storing wastewater from these activities, are surrounded with a bund with a capacity of 110% or greater than that of the largest tank within the bund. Areas to be banded include:
 - a) the AWT process building and tank farm; and
 - b) the perimeter of the AWT site.

Wastewater Management

- 2.6 The Proponent shall ensure that process wastewater from the ArrowBio plant is kept separate from the stormwater management system and is stored in a reservoir or tank engineered and designed in accordance with the requirements of the DEC's (1999) *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes*.

- 2.7 Prior to the irrigation or reuse of process wastewater from the ArrowBio plant on or off site, the Proponent shall provide evidence, to the satisfaction of the Director-General, that the DEC is satisfied with the standard of the wastewater for its intended application. Irrigation or reuse of process wastewater shall not commence until written approval has been provided by the Director-General.

This condition does not apply to any wastewater intended to be reused in the process as makeup water.

Waste Management

- 2.8 Except as provided by a condition of an EPL, the Proponent shall restrict the waste received at the site to the following:
- a) 130,000 tonnes per year of mixed municipal waste classified as inert or solid waste under Schedule 1 of the *Protection of the Environment Operations Act 1997*;
 - b) 25,000 tonnes per year of garden waste; and
 - c) 5,000 tonnes per year of biosolids.
- 2.9 Except as provided by a condition of an EPL, the Proponent shall ensure that the only wastes that are processed at the site are:
- a) 90,000 tonnes per year of mixed municipal waste classified as inert or solid waste under Schedule 1 of the *Protection of the Environment Operations Act 1997* at the ArrowBio Plant;
 - b) 25,000 tonnes per year of garden waste at the Garden Organics Plant; and
 - c) 5,000 tonnes per year of biosolids at the Garden Organics Plant.
- 2.10 Prior to applying any organic outputs to land, the Proponent shall fully characterise the organic outputs to be applied to land with supporting laboratory analysis and propose an appropriate specification to ensure this waste-derived material is fit for its intended purpose.

AS4454 Composts, soil conditioners and mulches and the DEC's *Environmental Guidelines: Use and Disposal of Biosolids Products* (1997) shall not be the sole determinants of the suitability (or otherwise) of this material for land application.

The characterisation and proposed specification shall be provided to the DEC, and evidence of the DEC's approval shall be provided to the Director-General within two weeks of the approval being granted.

- 2.11 Except as provided by a condition of an EPL, the Proponent shall ensure that the only waste landfilled at the site is non-putrescible waste.

Noise

- 2.12 The Proponent shall undertake all construction activities associated with the development that would generate an audible noise at any premises beyond the boundary of the site between the following hours:
- a) 7:00 am to 6:00 pm, Mondays to Fridays, inclusive;
 - b) 8:00 am to 1:00 pm, Saturdays; and
 - c) at no time on Sundays or public holidays
- unless otherwise approved in writing by the Director-General.
- 2.13 The Proponent shall ensure that noise from the project at all existing and proposed residences, including Glenlee House, does not exceed:
- a) a L_{Aeq} (15 minute) noise emission criterion of 39 dB(A) during the day/evening;
 - b) a L_{Aeq} (15 minute) noise emission criterion of 35 dB(A) during the night; and
 - c) a L_{A1} (1 minute) noise emission criterion of 45 dB(A) during the night.

Note: For the purposes of this condition, day is defined as the period from 7am to 6pm, Monday to Saturday, and 8am to 6pm, Sundays and Public Holidays. Evening is defined as the period from 6pm to 10pm. Night is defined as the period from 10pm to 7am, Monday to Saturday, and 10pm to 8am, Sundays and Public Holidays.

Noise emission limits apply under meteorological conditions of wind speeds up to 3 m/s at 10 metres above ground level or temperature inversions conditions of 3°C/100m and wind speed up to 2 m/s at 10 metres above the ground. To determine compliance with this condition, noise from the development must be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary.

Noise from the site is to be measured at 1m from the dwelling façade to determine compliance with the L_{A1} (1 minute) noise criterion specified in condition 2.13c. However, where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.

Transport

- 2.14 The Proponent shall ensure that heavy vehicles associated with the project do not enter or exit the site between 10pm and 7am, unless these movements are due to circumstances beyond the control of the Proponent.
- 2.15 Notwithstanding condition 2.14, the Proponent shall ensure that all waste to be processed at the site is received between the following hours:
- a) 7:00 am to 5:00 pm, Mondays to Fridays, inclusive;
 - b) 8:00 am to 4:00 pm, Saturdays and Sundays; and
 - c) 7:00 am to 2:00 pm on public holidays.
- 2.16 The Proponent shall take all reasonable steps to inform vehicles carrying waste to/from the development from MACROC Councils to use the following routes:
- a) Narellan Road, Camden Bypass, Springs Road, Richardson Road and the current right of way, when accessing the site from the north or east; and/or
 - b) Old Hume Highway, Camden Bypass, Springs Road, Richardson Road and the current right of way, when accessing the site from the south or west,
- prior to the finalisation of public access to the proposed arterial road referred to in the documents listed under condition 1.1.
- 2.17 Upon finalisation of public access to the proposed arterial road referred to in the documents listed under condition 1.1, the Proponent shall take all reasonable steps to inform vehicles carrying waste to/from the development from MACROC Councils to use the following routes:
- a) Narellan Road, Camden Bypass, arterial road and new public road when accessing the site from the north or east; and/or
 - b) Old Hume Highway, Camden Bypass, arterial road and new public road when accessing the site from the south or west.
- 2.18 Prior to finalisation of public access to the proposed road network referred to in the documents listed under condition 1.1, the Proponent shall pay Council \$13,194 annually for the maintenance of the local roads used by the AWT Facility. However, upon finalisation of public access to the proposed road network, the Proponent shall pay Council \$5,124 annually.

Note: This contribution is subject to indexation by the Implicit Price Deflator, as published by the Australian Bureau of Statistics.

- 2.19 Prior to the receipt of waste from non-MACROC Councils, the Proponent shall provide to Council details of vehicle access routes to the site for vehicles carrying waste from non-MACROC Councils. Evidence of consultation with Council shall be provided to the satisfaction of the Director-General.
- 2.20 The Proponent shall ensure that vehicles associated with the project do not park, queue or stand in any of the road reserves outside the site.

Mine Subsidence

- 2.21 The Proponent shall ensure that the project is designed to withstand the following mine subsidence parameters:
- a) Maximum subsidence: 1200mm
 - b) Maximum strains: 1.5mm
 - c) Maximum tilt: 5mm/m
 - d) Radius of curvature: 12000m

Visual

- 2.22 The Proponent shall ensure that all external lighting associated with the project:
- a) does not create a nuisance to surrounding properties or roadways; and
 - b) complies with AS 4282(INT) 1995 – *Control of Obtrusive Effects of Outdoor Lighting*.

Hazards

- 2.23 The Proponent shall ensure that Liquefied Natural Gas is not used at the site.

3. ENVIRONMENTAL MANAGEMENT AND MONITORING

Construction Environmental Management Plan

- 3.1 Prior to the commencement of construction, the Proponent shall prepare (and following approval implement) a **Construction Environmental Management Plan (CEMP)** for the project. This plan must outline the environmental management practices and procedures that would be implemented during each stage of construction, and include:
- a) a description of all activities to be undertaken on the site during construction of the project, including an indication of stages of construction, where relevant;
 - b) statutory and other obligations that the Proponent is required to fulfil during construction, including all approvals, consultations and agreements required from authorities and other stakeholders;
 - c) details of how the environmental performance of the construction works would be monitored, and what actions would be taken to address identified adverse environmental impacts;
 - d) a description of the roles and responsibilities for all relevant employees involved in the construction of the project
 - e) the management plans listed under condition 3.2; and
 - f) complaints handling procedures during construction and site preparation.

Site preparation and construction works associated with any stage of the project shall not commence until the Director-General has approved the CEMP for that stage.

- 3.2 The CEMP for the project shall include the following Management Plans:
- a) a **Soil and Water Management Plan** to detail measures to minimise the incidence of erosion and salinity during construction of the project. This plan must be prepared in consultation with the DEC, DNR and Council, and include:
 - i) an assessment of the potential salinity risk during construction;
 - ii) a description of the proposed erosion and sediment control measures, which must be consistent with best practice, and in general accordance with Landcom's

- publications *Soil and Water Management for Urban Development* and the *Managing Urban Stormwater – Soils and Construction*;
 - iii) details of any stormwater control dams, including evidence that such dams have sufficient capacity to cater for the 90th percentile 5 day rainfall event;
 - iv) details of the pollutant parameters of any pumped discharges from stormwater detention dams, including a limit of less than 50mg/L of Total Suspended Solids. No discharges shall contain water that has come into contact with waste;
 - v) a description of procedures that would be implemented to ensure that the erosion and sediment control measures are maintained at all times, and to address any erosion, should it occur; and
 - vi) a description of the decommissioning procedures for the proposed erosion and sediment control measures at the completion of construction.
- b) a **Noise Management Plan** to detail measures to manage and minimise noise emissions during construction. The plan must be prepared in consultation with the DEC, and include:
- i) identification of all work areas, site compounds and access routes (both private and public) to be used during construction;
 - ii) identification of the specific activities that will be carried out and associated noise sources occurring at each of the locations identified under condition 3.2b)i);
 - iii) identification of all potentially affected sensitive receivers;
 - iv) a comparison of predicted noise emissions with the construction noise and vibration objectives identified in the documents listed under condition 1.1 for construction periods greater than 26 weeks;
 - v) details of all noise mitigation measures to be implemented during construction, including the early erection of operational noise control barriers;
 - vi) monitoring measures for construction noise; and
 - vii) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity, and measures to receive, record and respond to complaints.
- c) a **Traffic Management Plan** to detail measures to manage and minimise the impact of construction traffic associated with the project. This plan must be prepared in consultation with the DEC, Council and Landcom, and include:
- i) details of predicted construction traffic volumes and proposed access routes in light of the planned closure of Springs Road, and proposed mitigation measures for the impact of construction vehicles on these routes;
 - ii) best noise practice in the selection and maintenance of construction vehicle fleets and specific procedures for drivers to minimise road traffic noise impacts, including limits to compression braking and movement scheduling where appropriate;
 - iii) clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures referred to in condition 3.3c)ii) and communication strategies for non-WSN owned and operated vehicles to ensure these procedures are implemented;
 - iv) a system of audited management practices that identifies non-conformances, initiates and monitors corrective and preventative action and assesses the implementation of the Traffic Management Plan.

Operation Environmental Management Plan

- 3.3 Prior to the commencement of operations, the Proponent shall prepare (and following approval implement) an **Operation Environmental Management Plan (OEMP)** for the project. This plan must describe the environmental management framework, practices and procedures that would be followed during operations, and include:
- a) identification of all statutory and other obligations that the Proponent is required to fulfil in relation to operation of the development, including all approvals, licences, approvals and consultations;

- b) a description of the roles and responsibilities for all relevant employees involved in the operation of the development;
- c) overall environmental policies, principles and performance measures that will be applied to the operation of the development; and
- d) the management plans listed under condition 3.4.

Operations shall not commence until the Director-General has approved the OEMP.

3.4 The OEMP for the project shall include the following Management Plans:

- a) a **Stormwater Management Plan** outlining the measures that would be implemented to manage the stormwater generated by the project. This plan shall be prepared in consultation with the DEC, and include:
 - (i) details of the proposed stormwater management system for the project, which must be designed as a first flush system to capture the first 10mm of stormwater for each m² of catchment; and
 - (ii) details of the program for the reuse of captured first flush stormwater, whether as process water in the ArrowBio Plant, as discharge to sewer, or tankering to an off site treatment facility, until such time as the Proponent has demonstrated to the satisfaction of the DEC that the stormwater is suitable for other management approaches.
- b) a **Vegetation Management Plan** outlining the measures that would be implemented to minimise the impacts of the project on surrounding vegetation. This plan must be prepared in consultation with DNR and Council, and include:
 - (i) details of any natural watercourses or riparian areas to be disturbed by the project;
 - (ii) details of the proposed program for the rehabilitation of disturbed areas; and
 - (iii) details of the proposed program for weed control at the site.

Odour Monitoring

3.5 Prior to the commencement of operations associated with the development, the Proponent shall prepare an ongoing odour monitoring program to ensure compliance with condition 2.1 of this approval throughout the life of the development, consistent with *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2005).

The Program shall be submitted for the approval of the Director-General and operations shall not commence until written approval has been received from the Director-General.

Noise Monitoring

3.6 Within 90 days of the commencement of operations associated with the development, and annually thereafter, the Proponent shall assess the noise emission performance of the development during a period in which the development is operating under normal operating conditions. The assessment shall include, but not necessarily be limited to:

- a) noise monitoring, consistent with the guidelines provided in the *New South Wales Industrial Noise Policy* (EPA, 2000), to assess compliance with condition 2.13 of this approval;
- b) a comparison of the results of the noise monitoring required under a) above, and the predicted noise impacts detailed in the documents listed under condition 1.1 of this approval; and
- c) details of any entries in the Complaints Register (condition 6.3 of this approval) relating to noise impacts.

A report providing the results of the program shall be submitted to the Director-General and the DEC within 28 days of completion of the testing required under a).

3.7 If the results of the monitoring required under conditions 3.5 and 3.6 indicate that the operation of any component of the development, when operating under design loads and

normal operating conditions, exceeds the limits imposed under conditions 2.1 and/or 2.13 of this approval, the Proponent shall provide details of remedial measures to be implemented and a timetable for implementation to reduce emissions to the levels required.

Details of the remedial measures shall be submitted to the Director-General for approval, and be accompanied by evidence that the DEC is satisfied that the remedial measures are acceptable.

4. COMPLIANCE

- 4.1 Prior to the commencement of construction and operations, the Proponent shall certify in writing to the satisfaction of the Director-General, that it has complied with all the applicable conditions of this approval.

5. ENVIRONMENTAL REPORTING

Incident Reporting

- 5.1 The Proponent shall notify the DEC and the Director-General of any incident with actual or potential significant off-site impacts on people or the biophysical environment as soon as practicable after the occurrence of the incident. The Proponent shall provide written details of the incident to the DEC and the Director-General within seven days of the date on which the incident occurred.

Annual Performance Reporting

- 5.2 Within 12 months of the commencement of operations, and annually thereafter, the Proponent shall submit an **Annual Environmental Management Report (AEMR)** for the project to the DEC, Council, and the Department. The AEMR shall include:
- a) details of compliance with the conditions of this approval, and any other licences and approvals for the project;
 - b) a list of variations obtained to approvals applicable to the development and to the site during the preceding twelve-month period;
 - c) a copy of the Complaints Register for the preceding twelve month period (exclusive of personal details), and a description of how these complaints were addressed and resolved;
 - d) a comparison of the environmental impacts and performance of the development against the environmental impacts and performance predicted in the documents listed under condition 1.1;
 - e) identification of trends in monitoring data over the life of the development to date; and
 - f) environmental management targets and strategies for the following twelve-month period, taking into account identified trends in monitoring results.

6. COMMUNITY INFORMATION, CONSULTATION AND INVOLVEMENT

Access to Information

- 6.1 Subject to confidentiality, the Proponent shall make all documents required under this approval publicly available.

Complaints Procedure

- 6.2 Prior to the commencement of construction, the Proponent shall establish a community complaints system to the satisfaction of the Director-General. This system must include:
- a) a 24-hour telephone number on which complaints about operations on the site may be registered;
 - b) a postal address to which written complaints may be sent; and
 - c) an email address to which electronic complaints may be transmitted, should the Proponent have email capabilities.

The telephone number, the postal address and the email address shall be advertised in a newspaper circulating within the locality on at least one occasion prior to the commencement of construction of each stage of the development. These details must also be displayed on a sign near the entrance to the site, in a position that is clearly visible to the public and on the Proponent's internet site, should one exist. The telephone number, postal address and email address must be maintained throughout the life of the development.

- 6.3 The Proponent must record details of all complaints received about the project in an up-to-date Complaints Register. This register must record, but not necessarily be limited to:
- the date and time, where relevant, of the complaint;
 - a) the means by which the complaint was made (telephone, mail or email);
 - b) any personal details of the complainant that were provided, or if no details were provided, a note to that effect;
 - c) the nature of the complaint;
 - d) any action(s) taken by the Proponent in relation to the complaint, including any follow-up contact with the complainant; and
 - e) if no action was taken by the Proponent in relation to the complaint, the reason(s) why no action was taken.

The Complaints Register must be made available for inspection by the Director-General upon request.

Modification Approval

Section 75W of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, modify the project approval referred to in Schedule 1, in the manner indicated in Schedule 2.

Frank Sartor MP
Minister for Planning

Sydney

2006

File No: S04/00422

SCHEDULE 1

Project Approval: Granted by the Minister for Planning on 7 September 2006.

In respect of: Project application 06_0098 made by WSN Environmental Solutions, in relation to land described as Lot 2 DP 250033, Lot 3 DP 250033, Lot 4 DP 250033, Lot 2 DP 1076817, Camden local government area.

For the following: Jacks Gully Alternative Waste Technology Facility.

Modification Application: Modification (06_0098 Mod 1) of the project approval to change the property description following subdivision.

SCHEDULE 2

The project approval is modified by:

1. Replacing the land description in Schedule 1 with the following:

Land: Lot 2 DP 250033, Lot 33 DP 1096463, Lot 34 DP 1096463, Lot 2 DP 1076817, Camden local government area.

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the development consent referred to in Schedule 1 as set out in Schedule 2.



Chris Wison
Executive Director
Major Projects Assessment

Sydney

26 August

2010

File No: S04/00422

SCHEDULE 1

Application No: 05_0098.

Proponent: WSN Environmental Solutions

Approval Authority: Minister for Planning

Land: Lot 35 DP 1098588, Lot 21 DP 1125616, Lot 2 DP 1076817 and Lot 33 DP 1096463, Camden local government area

Project: Jacks Gully Alternative Waste Technology Facility

SCHEDULE 2

The project approval is modified by:

1. Replacing existing condition 1.1 in Schedule 1 with the following:
 - 1.1 The Proponent shall carry out the project generally in accordance with the:
 - a) Major Project Application 05_0098, lodged with the Department of Planning on 14 December 2005;
 - b) environmental assessment: *Environmental Assessment: Proposed Alternative Waste Technology Facility at Jacks Gully Waste and Recycling Centre* (WSN Environmental Solutions, March 2006, Volumes 1 and 2);
 - c) the Statement of Commitments, prepared by WSN Environmental Solutions and dated March 2006;

- d) Responses to Submissions prepared by WSN Environmental Solutions, dated 16 June 2006; and
- e) Modification 1 (06_0098 Mod 1), change the property description following subdivision;
- f) Modification 2 (06_0098 Mod 2), amendment to the land description;
- g) modification application 05_0098 MOD 3, dated March 2010, accompanied by documents titled *Macarthur Resource Recovery Park – Application under S.75W of the Environmental Planning & Assessment Act 1979 to Modify the Ministers Consent No. 05/0098 dated 7 September 2006 – Environmental Assessment, As amended June 2010 and Jacks Gully AWT Plant Landfill Gas Supply Hazards and Operability Study dated August 2009*; and
- h) conditions of this approval.

2. Insert new condition 1.4 directly after condition 1.3:

- 1.4 Within 3 months of the date of the approval for 05_0098 MOD 3 the Proponent shall:
- a) obtain and provide copies to the Director-General all necessary building certificate(s) from Camden City Council for all buildings and structures the subject of modification application 05_0098 MOD 3; and
 - b) ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the Building Code of Australia.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the project.
- As the 1998 consent was issued under the Unamended Act it refers to Building Applications which have been replaced with Construction Certificates under the Amended Act. As such, all reference to Building Applications in the 1998 consent shall be noted as references to Construction Certificates. In accordance with the clause 20 of the Environmental Planning and Assessment (Savings and Transitional) Regulation 1998, as the Minister issued a Building Approval, the Minister is the Principal Certifying Authority.

3. Insert new condition 2.24 directly after condition 2.23:

- 2.24 Prior to the commissioning the gas pipeline, the Proponent shall:
- a) implement the proposed safeguards and actions listed in Appendix A of the HAZOP study report (AECOM, 26 August 2009)
 - b) prepare and implement a Commissioning Procedure; and
 - c) prepare and implement a Safety and Operating Plan (SAOP);
- for the pipeline based on Australian Standard AS/NZS 4645.1-2008 – Gas Distribution Networks, Part 1:- Network Management, to the satisfaction of the Director-General.

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, I modify the development consent referred to in Schedule 1 as set out in Schedule 2.



Chris Wilson
Executive Director
Major Projects Assessment

Sydney

10 DECEMBER

2010

File No: 10/23426-1

SCHEDULE 1

Application No: 05_0098.

Proponent: WSN Environmental Solutions

Approval Authority: Minister for Planning

Land: Lot 35 DP 1098588, Lot 21 DP 1125616, Lot 2 DP 1076817 and Lot 33 DP 1096463, Camden local government area

Project: Jacks Gully Alternative Waste Technology Facility

SCHEDULE 2

The project approval is modified by:

1. Replacing existing condition 1.1 in Schedule 1 with the following:
 - 1.1 The Proponent shall carry out the project generally in accordance with the:
 - a) Major Project Application 05_0098, lodged with the Department of Planning on 14 December 2005;
 - b) environmental assessment: *Environmental Assessment: Proposed Alternative Waste Technology Facility at Jacks Gully Waste and Recycling Centre* (WSN Environmental Solutions, March 2006, Volumes 1 and 2);
 - c) the Statement of Commitments, prepared by WSN Environmental Solutions and dated March 2006;

- d) Responses to Submissions prepared by WSN Environmental Solutions, dated 16 June 2006; and
- e) Modification 1 (06_0098 Mod 1), change the property description following subdivision;
- f) Modification 2 (06_0098 Mod 2), amendment to the land description;
- g) modification application 05_0098 MOD 3, dated March 2010, accompanied by documents titled *Macarthur Resource Recovery Park – Application under S.75W of the Environmental Planning & Assessment Act 1979 to Modify the Ministers Consent No. 05/0098 dated 7 September 2006 – Environmental Assessment, As amended June 2010 and Jacks Gully AWT Plant Landfill Gas Supply Hazards and Operability Study dated August 2009*;
- h) Modification Application 06_0098 MOD 4, dated September 2010, accompanied by documents titled *Macarthur Resource Recovery Park – Application under S.75W of the Environmental Planning & Assessment Act 1979 to Modify the Ministers Consent No. 05/0098 dated 7 September 2006 – Environmental Assessment, dated September 2010*; and
- i) conditions of this approval.

2. Replace existing condition 2.8 and 2.9 with the following:

- 2.8 Except as provided by a condition of an EPL, the Proponent shall restrict the waste received at the site to the following:
- a) 130,000 tonnes per year of mixed municipal waste classified as inert or solid waste under Schedule 1 of the *Protection of the Environment Operations Act 1997*;
 - b) 25,000 tonnes per year of garden waste; and
 - c) an additional 5,000 tonnes per year of garden waste or biosolids.
- 2.9 Except as provided by a condition of an EPL, the Proponent shall ensure that the only wastes that are processed at the site are:
- a) 90,000 tonnes per year of mixed municipal waste classified as inert or solid waste under Schedule 1 of the *Protection of the Environment Operations Act 1997* at the ArrowBio Plant;
 - b) 25,000 tonnes per year of garden waste at the Garden Organics Plant; and
 - c) an additional 5,000 tonnes per year of garden waste or biosolids at the Garden Organics Plant.

3. Insert new condition 3.5a directly after condition 3.5:

- 3.5a The Proponent shall prepare and implement a Standard Operating Procedure (SOP) to control fugitive emissions from the operations of the Garden Organics Plant. The SOP shall be:
- a) consistent with the existing Environmental Management Plan;
 - b) developed in consultation with Council; and
 - c) submitted to the Director-General for approval within 3 months of approval of Modification 4.

Notice of Modification

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning, under delegation dated 16 February 2015, I approve the modification of the project approval referred to in Schedule 1, subject to the conditions in Schedule 2.



David Gainsford
A/Executive Director
Key Sites and Industry Assessments

Sydney 10th December 2015

SCHEDULE 1

The Project Approval (05_0098) granted by the Minister for Planning for Jack's Gully Alternative Waste Technology Facility on 7 September 2006.

SCHEDULE 2

- | | |
|---|--|
| In the table of definitions in Schedule 2, delete the definitions for DEC, Department, Director-General and Proponent and insert the following in alphabetical order: | |
| Department | Department of Planning and Environment. |
| DPI | Department of Primary Industries. |
| EPA | Environment Protection Authority. |
| Feasible | Feasible relates to engineering considerations and what is practical to build. |
| Garden Waste | As defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> . |
| General Solid Waste | As defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> . |
| Incident | A set of circumstances that: <ul style="list-style-type: none">causes or threatens to cause material harm to the environment; and/orbreaches or exceeds the limits or performance measures/criteria in this approval. |
| Liquid Waste | As defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> . |
| Material harm to the environment | Actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial. |
| Mitigation | Activities associated with reducing the impacts of the project prior to or during those impacts occurring. |
| Organic Waste | As defined in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> . |
| Proponent | SITA Australia Pty Ltd, or its successors. |
| Reasonable | Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements. |
| Secretary | Secretary of the Department (or nominee). |
- Delete all instances of the word DEC and replace with EPA.
- Delete all instances of the word Director-General and replace with Secretary.

4. Delete all instances of the word DNR and replace with DPI.
5. In condition 1.1, delete paragraph i) and insert instead:
 - i) Modification Application 05_0098 MOD 5, dated 30 October 2013, accompanied by documents titled, *Environmental Assessment: Modification Application – Spring Farm Advanced Resource Recovery Technology (ARRT) Facility*, dated 30 October 2013, prepared by Cardno NSW/ACT, and *Response to Submissions to the Public Exhibition, Spring Farm Resource Recovery Facility S.75W Modification Application (05_0098 MOD 5)*, dated 12 January 2015, prepared by Cardno NSW/ACT.
6. Delete conditions 2.8 and 2.9 and insert instead:
 - 2.8 The Proponent shall not cause, permit or allow any materials or waste generated outside the site to be received at the site for storage, resource recovery, processing, or disposal on the site, except as expressly permitted by an EPL.
 - 2.9 The Proponent shall not receive or process on the site more than:
 - a) 130,000 tonnes per year of General Solid Waste;
 - b) 25,000 tonnes per year of Garden Waste;
 - c) 5,000 tonnes per year of Organic Waste; and
 - d) 520m³ per day of Liquid Waste comprising liquid organic waste and leachate.
7. Delete condition 2.11.
8. Insert the following conditions immediately after condition 2.24:
 - 2.25 The Proponent shall prepare the studies set out under subsections a) to b) (the pre-construction studies). Construction associated with MOD 5, other than preliminary works that are outside the scope of the hazard studies, shall not commence until the recommendations of the study have been considered and, where appropriate, acted upon:
 - a) a Hazard and Operability Study for MOD 5, chaired by an independent qualified person. The study shall be consistent with the Department's *Hazardous Industry Planning Advisory Paper No. 8, 'HAZOP Guidelines'*; and
 - b) a Final Hazard Analysis for MOD 5, consistent with the Department's *Hazardous Industry Planning Advisory paper No 6 "Hazard Analysis"*. The document shall be prepared and submitted to the Department no later than one month prior to the commencement of construction of MOD 5 (other than preliminary works), or within such further period as the Secretary may agree.
 - 2.26 The Proponent shall develop and implement the plans and systems set out under subsections a) to b). No later than two months prior to the commencement of commissioning of MOD 5, or within such further period as the Secretary may agree, the Proponent shall submit for the approval of the Secretary documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Secretary.
 - a) the Proponent's Emergency Plan and detailed emergency procedures shall be updated to incorporate any changes due to MOD 5. The plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'*; and
 - b) the Proponent's Safety Management System shall be updated to include any changes due to MOD 5. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Secretary upon request. The Safety Management System shall be developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'*.

9. Insert the following condition immediately after condition 3.4:

Meteorological monitoring

3.4a The Proponent shall operate a meteorological station on the site that complies with the requirements in the latest version of the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales*.

10. Insert the following conditions immediately after condition 3.5a:

Odour Audit

3.5b The Proponent shall carry out an Odour Audit of the Project no later than 6 months after the commencement of operation of the tank farm. The audit must:

- a) be carried out by a suitably qualified and experienced independent person(s), whose appointment has been endorsed by the Secretary;
- b) audit the Project in full operation;
- c) include a summary of odour complaints and any actions that were carried out to address the complaints;
- d) validate the Project against odour impact predictions in Modification Application 05_0098 MOD 5;
- e) review design and management practices in the Project against industry best practice for odour management; and
- f) include an action plan that identifies and prioritises any odour mitigation measures that may be necessary to reduce odour emissions.

Note: The odour audit may be prepared so that it addresses the requirements of this consent and the EPL for the Development.

3.5c The Proponent shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of the Odour Audit.

11. Delete conditions 5, 5.1, 5.2, 6, 6.1, 6.2 and 6.3 and insert the following:

C. REPORTING, REVIEW AND ACCESS TO INFORMATION

Incident reporting

C1. The Proponent shall notify, at the earliest opportunity, the Secretary and any other relevant agencies of any incident that has caused, or threatens to cause, material harm to the environment. For any other incident associated with the Project, the Proponent shall notify the Secretary and any other relevant agencies as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Secretary and any relevant agencies with a detailed report on the incident, and such further reports as may be requested.

Regular reporting

C2. The Proponent shall provide regular reporting on the environmental performance of the Project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.

Independent Environmental Audit

C3. Within 1 year of the date of approval to Modification 5, and every 3 years thereafter, unless the Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:

- a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- b) led by a suitably qualified auditor, and include experts in fields specified by the Secretary;
- c) include consultation with the relevant agencies;
- d) assess the environmental performance of the Project and assess whether it is complying with the requirements in this approval, and any other relevant approvals

- and relevant EPL/s (including any assessment, plan or program required under the approvals);
 - e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals; and
 - f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy, plan or program required under the approvals.
- C4. Within three months of commissioning this audit, or as otherwise agreed by the Secretary, the Proponent shall submit a copy of the audit report to the Secretary, together with its response to any recommendations contained in the audit report.

Annual review

- C5. Within 1 year of the date of approval to Modification 5, and every year thereafter, the Proponent shall review the environmental performance of the Project. This review must:
- a) describe the operations that were carried out in the previous calendar year, and the operations that are proposed to be carried out over the next year;
 - b) include a comprehensive review of the monitoring results and complaints records of the project over the previous calendar year, which includes a comparison of the results against the:
 - (i) the relevant statutory requirements, limits or performance measures/criteria;
 - (ii) requirements of any plan or program required under this approval;
 - (iii) the monitoring results of previous years; and
 - (iv) the relevant predictions in the EA;
 - c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
 - d) identify any trends in the monitoring data over the life of the Project;
 - e) identify any discrepancies between the predicted and actual impacts of the Project, and analyse the potential cause of any significant discrepancies; and
 - f) describe what measures will be implemented over the next year to improve the environmental performance of the Project.

Revision of strategies, plans and programs

- C6. Within 3 months of the submission of an:
- a) annual review under Condition C5 above;
 - b) incident report under Condition C1 above;
 - c) audit under Condition C3 above; or
 - d) any modification to this consent,

the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.

- C7. The Proponent shall ensure that the operation of the Project is undertaken in accordance with all relevant updated and/or amended strategies, management plans and programs approved by the Secretary (or as revised and approved by the Secretary), unless otherwise agreed by the Secretary.

Access to information

- C8. The Proponent shall:
- a) make copies of the following publicly available on its website:
 - (i) the documents referred to in Condition 1.1;
 - (ii) all current statutory approvals for the Project;
 - (iii) all approved strategies, plans and programs required under the conditions of this consent;
 - (iv) a comprehensive summary of the monitoring results of the Project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs;

- (v) a complaints register, updated on a monthly basis;
 - (vi) the annual reviews of the Project;
 - (vii) any independent environmental audit of the Project, and the Proponent's response to the recommendations in any audit; and
 - (viii) any other matter required by the Secretary; and
- b) keep this information up to date.

APPENDIX D ENVIRONMENTAL PROTECTION LICENCE

Environment Protection Licence

Licence - 12588

Licence Details

Number:	12588
Anniversary Date:	10-October

Licensee

SUEZ RECYCLING & RECOVERY PTY LTD
 LOCKED BAG 5015
 KINGSGROVE DC NSW 2208

Premises

ECOLIBRIUM MIXED WASTE AND ORGANICS FACILITY
 20 BARROW ROAD
 SPRING FARM NSW 2570

Scheduled Activity

Composting
 Electricity generation
 Resource recovery
 Waste processing (non-thermal treatment)

Fee Based Activity

Scale

Composting	> 50000 T annual capacity to receive organics
Generation of electrical power otherwise than from coal, diesel or gas	0-250 GWh annual generating capacity
Non-thermal treatment of general waste	Any annual processing capacity
Non-thermal treatment of liquid waste	Any annual processing capacity
Recovery of general waste	Any general waste recovered

Region

Waste & Resource Recovery
 59-61 Goulburn Street
 SYDNEY NSW 2000
 Phone: (02) 9995 5000
 Fax: (02) 9995 5999
 PO Box A290
 SYDNEY SOUTH NSW 1232

Environment Protection Licence

Licence - 12588



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Environment Protection Licence

Licence - 12588



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Environment Protection Licence

Licence - 12588



Information about this licence

Dictionary

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 - 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

Duration of licence

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

Environment Protection Licence

Licence - 12588



The EPA publication “A Guide to Licensing” contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

This licence is issued to:

SUEZ RECYCLING & RECOVERY PTY LTD
LOCKED BAG 5015
KINGSGROVE DC NSW 2208

subject to the conditions which follow.

Environment Protection Licence

Licence - 12588

1 Administrative Conditions

A1 What the licence authorises and regulates

- A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Composting	Composting	> 50000 T annual capacity to receive organics
Electricity generation	Generation of electrical power otherwise than from coal, diesel or gas	0 - 250 GWh annual generating capacity
Waste processing (non-thermal treatment)	Non-thermal treatment of general waste	Any annual processing capacity
Waste processing (non-thermal treatment)	Non-thermal treatment of liquid waste	Any annual processing capacity
Resource recovery	Recovery of general waste	Any general waste recovered

A2 Premises or plant to which this licence applies

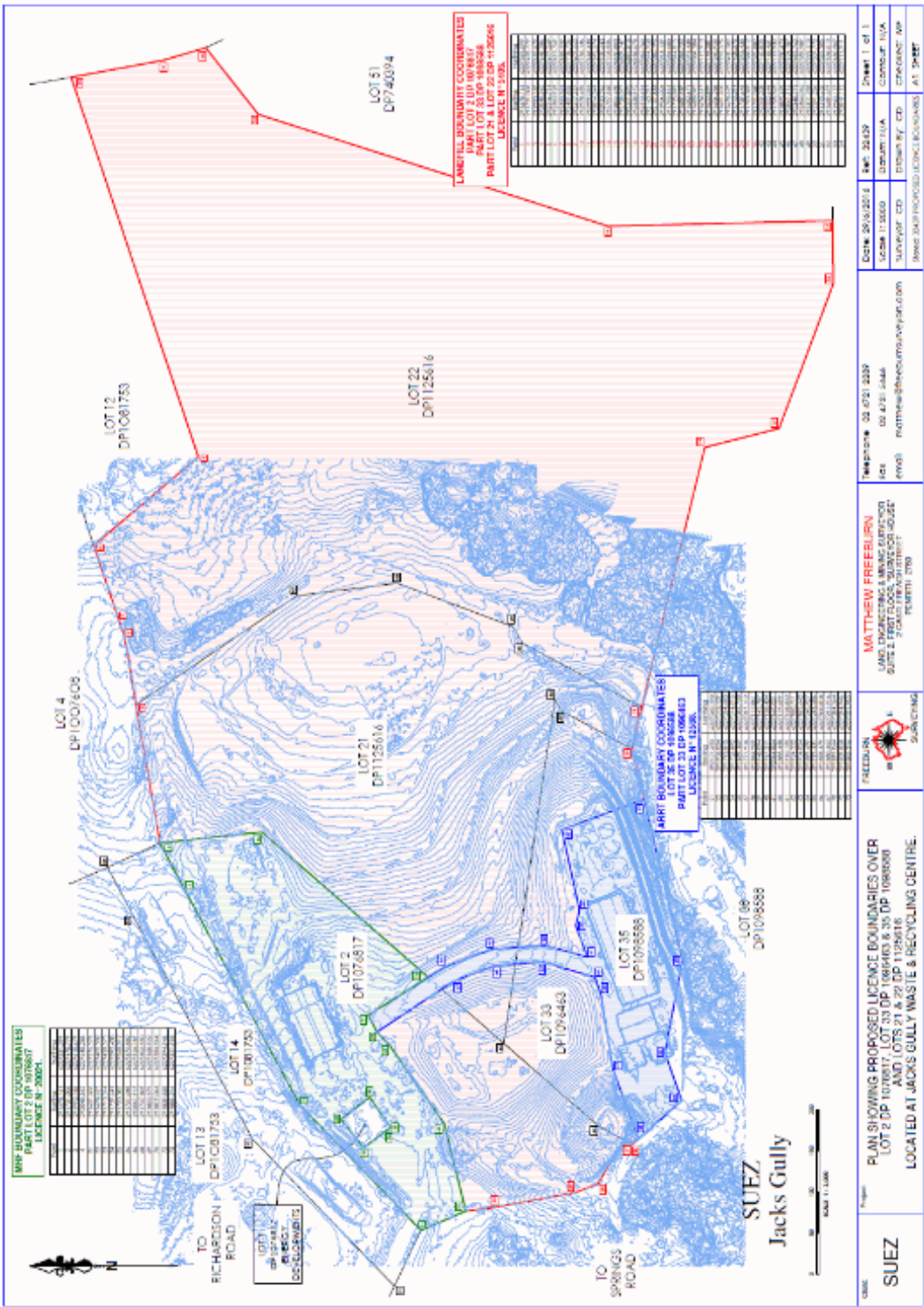
- A2.1 The licence applies to the following premises:

Premises Details
ECOLIBRIUM MIXED WASTE AND ORGANICS FACILITY
20 BARROW ROAD
SPRING FARM
NSW 2570
PART LOT 2 DP 1076817, PART LOT 33 DP 1096463, LOT 35 DP 1098588, PART LOT 21 DP 1125616

- A2.2 The premises location is shown on the map below.

Environment Protection Licence

Licence - 12588



Note: Please see Plan prepared by Freeburn Surveying on behalf of the licensee titled *Plan showing proposed boundaries over Lot 2 DP 1076817, Lot 33 DP 1096463 & 35 DP 1098588 and Lots 21 & 22 DP 1125616* (See DOC16/405848).

A3 Information supplied to the EPA

Environment Protection Licence

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- A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

2 Limit Conditions

L1 Pollution of waters

- L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

L2 Waste

- L2.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Leachate	Leachate from other SUEZ's licensed waste facilities	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and leachate combined, received at the premises must not exceed 520 cubic metres per day.
NA	Grease Trap Waste (Liquid)	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and

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				leachate combined, received at the premises must not exceed 520 cubic metres per day.
K120	Liquid Food Waste	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and leachate combined, received at the premises must not exceed 520 cubic metres per day.
NA	General solid waste (putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Composting Resource recovery Waste processing (non-thermal treatment)	NA
NA	General solid waste (non-putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Composting Resource recovery Waste processing (non-thermal treatment)	NA

L2.2 The authorised amount of waste permitted on the premises cannot exceed 6,500 tonnes at any one time.

L3 Noise limits

L3.1 Noise from the premises must not exceed the sound pressure levels (noise limits) presented in the table below. Note the limits represent the sound pressure level (noise) contribution, at the nominated receiver locations in the table.

For the purpose of this condition:

- Day is defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays,
- Evening is defined as the period from 6pm to 10pm, and
- Night is defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8pm Sundays and Public Holidays.

Noise Assessment Location	Day/Evening (L Aeq(15min))	Night (L Aeq(15min))	Night (L A1(1min))
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Environment Protection Licence

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All existing and proposed residences including Glenlee House	39	35	45
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- L3.2 The noise emission limits identified in the above table apply under meteorological conditions of :
- Wind speeds up to 3m/s at 10 metres above the ground level; or
 - Temperature inversion conditions of up to 30C/100m and wind speed up to 2m/s at 10 metres above the ground.
- L3.3 Noise from the premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise levels in the licence.
- L3.4 Noise from the premises is to be measured at 1m from the dwelling façade to determine compliance with LA1 (1 minute) noise level in the Licence.

Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy.

L4 Hours of operation

- L4.1 For the purpose of controlling potential odour emissions, the activities listed in condition L5.2 shall only be conducted during the hours of 0600 hrs to 1800 hrs
- L4.2 The following activities shall only be conducted during the operating hours specified in condition L5.1:
- Dewatering and handling of the ArrowBio Digestate outside the waste water treatment vessels.
 - Removal of general solid waste (residual) from the Waste Process Hall, Waste Receiving Hall and Waste Water Treatment Plant.
 - Opening of compost tunnels, handling and processing of composted material and loading compost for transport
 - Other activities likely to cause odorous emissions.

L5 Potentially offensive odour

- L5.1 No condition of this licence identifies a potentially offensive odour for the purposes of section 129 of the Protection of the Environment Operations Act 1997.

Note: Section 129 of the Protection of the Environment Operations Act 1997, provides that the licensee must not cause or permit the emission of any offensive odour from the premises but provides a defence if the emission is identified in the relevant environment protection licence as a potentially offensive odour and the odour was emitted in accordance with the conditions of a licence directed at minimising odour.

3 Operating Conditions

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O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

O2 Maintenance of plant and equipment

O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

O3 Dust

O3.1 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.

O4 Emergency response

O4.1 The licensee must maintain, and implement as necessary, a current emergency response plan for the premises. The licensee must keep the emergency response plan on the premises at all times. The emergency response plan must document systems and procedures to deal with all types of incidents (e.g. spills, explosions or fire) that may occur at the premises or that may be associated with activities that occur at the premises and which are likely to cause harm to the environment. If a current emergency response plan does not exist at the date on which this condition is attached to the licence, the licensee must develop an emergency response plan within three months of that date.

O5 Processes and management

Construction environmental management plan

O5.1 The licensee must implement the actions outlined in the document titled "Construction Environmental Management Plan" dated August 2006.

The Construction Environmental Management Plan includes the following plans:

- a) a Soil and Management Plan;
- b) a Noise Management Plan; and
- c) a Traffic Management Plan.

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O6 Waste management

Waste Processing Outside of Buildings

O6.1 Processing of waste shall only occur in the buildings constructed for that purpose.

O7 Other operating conditions

Bunding

O7.1 The licensee must ensure, prior to commencement of operation of the waste facility, that all above-ground tanks and vats including those used for treating or processing waste/water slurry and tanks for storing wastewater for these activities are surrounded by a bund with a capacity of 110% or greater than that of the largest tanks within the bund. Areas to be banded include:

- a) the AWT process building and tank farm; and
- b) the perimeter of the AWT site.

4 Monitoring and Recording Conditions

M1 Monitoring records

M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.

M1.2 All records required to be kept by this 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) produced in a legible form to any authorised officer of the EPA who asks to see them.

M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:

- 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.

M2 Recording of pollution complaints

M2.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

M2.2 The record must include details of the following:

- a) the date and time of the complaint;

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- b) the method by which the complaint was made;
- c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) the nature of the complaint;
- e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) if no action was taken by the licensee, the reasons why no action was taken.

M2.3 The record of a complaint must be kept for at least 4 years after the complaint was made.

M2.4 The record must be produced to any authorised officer of the EPA who asks to see them.

M3 Telephone complaints line

- M3.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M3.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M3.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

5 Reporting Conditions

R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
 - 1. a Statement of Compliance,
 - 2. a Monitoring and Complaints Summary,
 - 3. a Statement of Compliance - Licence Conditions,
 - 4. a Statement of Compliance - Load based Fee,
 - 5. a Statement of Compliance - Requirement to Prepare Pollution Incident Response Management Plan,
 - 6. a Statement of Compliance - Requirement to Publish Pollution Monitoring Data; and
 - 7. a Statement of Compliance - Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.

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- R1.3 Where this licence is transferred from the licensee to a new licensee:
- a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
 - b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.

Note: An application to transfer a licence must be made in the approved form for this purpose.

- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
- a) in relation to the surrender of a licence - the date when notice in writing of approval of the surrender is given; or
 - b) in relation to the revocation of the licence - the date from which notice revoking the licence operates.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
- a) the licence holder; or
 - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- R1.8 After the licensee's premises cease to be used for the purpose to which the licence relates or in the event that the licensee ceases to carry out the activity that is subject of this licence, that licensee must:
- a) remove and lawfully dispose of all liquid and mom-liquid waste stored on the licensee's premises; and
 - b) rehabilitate the site, including conducting an assessment of and if required remediation of any site contamination.
- R1.9 In the event of an earthquake, storm, fire, flood or any other event where it is reasonable to suspect that a pollution incident has occurred, is occurring or is likely to occur, the licensee (whether or not the premises continue to be used for the purposes to which the licence relates) must:
- a) make all efforts to contain firewater on the licensee's premises,
 - b) make all efforts to control air pollution from the licensee's premises,
 - c) make all efforts to contain any discharge, spill or run-off from the licensee's premises,
 - d) make all efforts to prevent flood water entering the licensee's premises,
 - e) remediate and rehabilitate any exposed areas of soils and/or waste,
 - f) lawfully dispose of all liquid and solid waste(s) stored on the premises that is not already securely disposed of,
 - g) at the request of the EPA monitor groundwater beneath the licensee's premises and its potential to migrate from the licensee's premises, at the request of the EPA monitor surface water leaving the licensee's premises; and
 - h) ensure the licensee's premises is secure.

- R1.10 While the licensee's premises are being used for the purpose to which the licence relates, the licensee

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must:

- a) Clean up any spill, leak or other discharge of any waste(s) or other material(s) as soon as practicable after it becomes known to the licensee or to one of the licensee's employees or agents.
- b) In the event(s) that any liquid and non-liquid waste(s) must be removed and lawfully disposed of as soon as practicable or in accordance with any direction given by the EPA.

R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.

Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
 - a) where this licence applies to premises, an event has occurred at the premises; or
 - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the carrying out of the activities authorised by this licence,and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.
- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
 - a) the cause, time and duration of the event;
 - b) the type, volume and concentration of every pollutant discharged as a result of the event;
 - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
 - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
 - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
 - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
 - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

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6 General Conditions

G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

7 Pollution Studies and Reduction Programs

U1 Enclosure of Green Waste Reveal Bay

- U1.1 By 3 September 2019, the licensee must enclose the green waste reveal bay on three sides.

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Dictionary

General Dictionary

3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
CEM	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
general solid waste (non-putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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flow weighted composite sample	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
general solid waste (putrescible)	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
grab sample	Means a single sample taken at a point at a single time
hazardous waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
licensee	Means the licence holder described at the front of this licence
load calculation protocol	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
local authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
material harm	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
MBAS	Means methylene blue active substances
Minister	Means the Minister administering the Protection of the Environment Operations Act 1997
mobile plant	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
motor vehicle	Has the same meaning as in the Protection of the Environment Operations Act 1997
O&G	Means oil and grease
percentile [in relation to a concentration limit of a sample]	Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.
plant	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
pollution of waters [or water pollution]	Has the same meaning as in the Protection of the Environment Operations Act 1997
premises	Means the premises described in condition A2.1
public authority	Has the same meaning as in the Protection of the Environment Operations Act 1997
regional office	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
reporting period	For the purposes of this licence, the reporting period means the period of 12 months after the issue of the licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
restricted solid waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
scheduled activity	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
special waste	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
TM	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .

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TSP	Means total suspended particles
TSS	Means total suspended solids
Type 1 substance	Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements
Type 2 substance	Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any compound containing one or more of those elements
utilisation area	Means any area shown as a utilisation area on a map submitted with the application for this licence
waste	Has the same meaning as in the Protection of the Environment Operations Act 1997
waste type	Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non - putrescible), special waste or hazardous waste

Mr Stephen Beaman

Environment Protection Authority

(By Delegation)

Date of this edition: 10-October-2006

Environment Protection Licence

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End Notes

- 1 Licence varied by notice 1069652, issued on 23-May-2007, which came into effect on 23-May-2007.
- 2 Licence varied by notice 1073962, issued on 30-May-2007, which came into effect on 30-May-2007.
- 3 Licence varied by notice 1093072, issued on 14-Nov-2008, which came into effect on 14-Nov-2008.
- 4 Licence varied by notice 1104466, issued on 29-Jul-2009, which came into effect on 29-Jul-2009.
- 5 Licence varied by notice 1113551, issued on 19-May-2010, which came into effect on 19-May-2010.
- 6 Licence varied by Correction to EPA Region data record., issued on 28-Jun-2010, which came into effect on 28-Jun-2010.
- 7 Licence varied by correction to DECCW Region data record, issued on 07-Jul-2010, which came into effect on 07-Jul-2010.
- 8 Licence varied by notice 1118588, issued on 19-Aug-2010, which came into effect on 19-Aug-2010.
- 9 Licence varied by notice 1118942, issued on 07-Sep-2010, which came into effect on 07-Sep-2010.
- 10 Licence varied by notice 1119452, issued on 15-Sep-2010, which came into effect on 15-Sep-2010.
- 11 Licence transferred through application 146434, approved on 01-Mar-2011, which came into effect on 01-Mar-2011.
- 12 Licence varied by notice 1126570, issued on 04-Apr-2011, which came into effect on 04-Apr-2011.
- 13 Licence varied by notice 1532744 issued on 20-Aug-2015
- 14 Licence varied by notice 1539039 issued on 01-Apr-2016
- 15 Licence varied by notice 1543761 issued on 12-Sep-2016
- 16 Licence varied by notice 1568504 issued on 17-Aug-2018
- 17 Licence varied by notice 1580023 issued on 07-Jun-2019

APPENDIX E ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan

Spring Farm ARRF

Document #. PLANS004.1.3

Issue date 10 Oct 18

Version 6



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1. Introduction

1.1. Purpose

The purpose of this document is to describe the environmental management of operational activities at Spring Farm Advanced Resource Recovery Facility (ARRF) that have, or are likely to have, an impact on the environment. This document sets out detailed procedures and measures that must be taken to minimise and eliminate environmental impact. This document also assists internal and external stakeholders in assessing environmental performance and ensures transparency across environmental operations.

SUEZ's Environmental, Quality and Safety (EQS) Management System is structured in accordance with the requirements of the following standards:

- AS/NZS 4801:2001 Occupational Health and Safety Management Systems;
- ISO 14001:2015 Environmental Management Systems; and
- ISO 9001:2015 Quality Management System.

SUEZ is certified to the above standards by an independent third-party.



Figure 1 Aerial view of Spring Farm ARRF

“SUEZ is committed to undertaking all activities in an environmentally responsible way, preventing pollution and proactively developing environmentally sustainable activities.” – *Environment Policy*

1.2. Scope

This document applies to all activities undertaken at the Spring farm ARRF.

1.3. Statutory Requirements

Spring farm ARRF operates under an Environment Protection Licence (EPL 12588) (refer to Appendix 1. for further information on this licence) issued by the New South Wales Environment Protection Authority (EPA).

The procedure for maintaining compliance with legal and regulatory requirements at Spring Farm ARRF is outlined in “*PROC001 Legislative and Other Requirements*” Procedure. The procedure designates responsibility for identifying applicable legal and regulatory requirements and ensuring access is maintained on-site to applicable legal and regulatory requirements.

Relevant statutory requirements are maintained in the Legislative Register – Environmental.

1.4. Development Consent

The construction of Spring farm ARRF was granted development consent in 2006 by Camden Council and was managed by Waste Services NSW. SUEZ subsequently acquired the site in 2011.

Project approval 05_0098 was granted by the Minister for Planning in 2006 and is subject to further approved modifications where compliance is managed at site level.

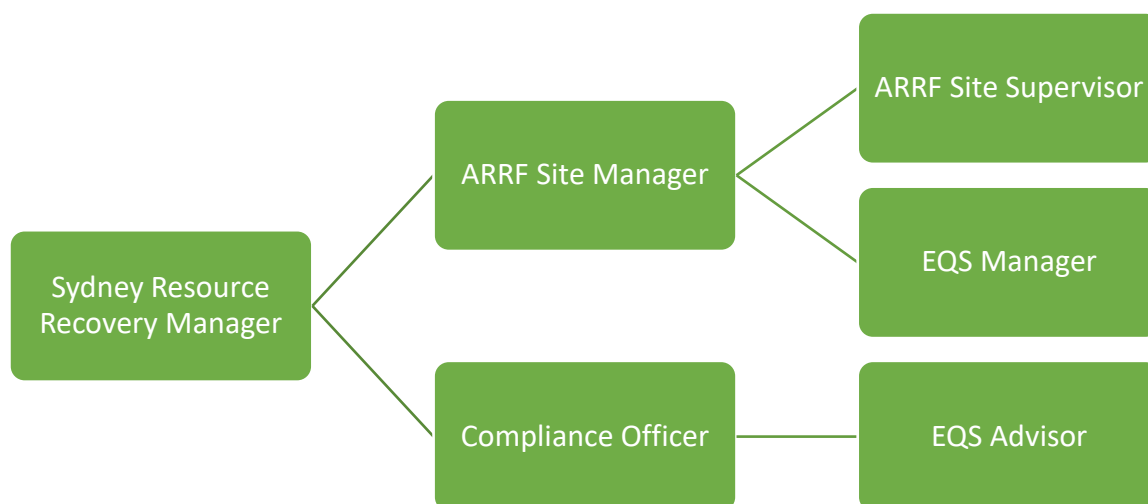
MOD 1: 06_0098 – Change in property description following sub division

MOD 2: 06_0098 – Amendment to land description

MOD 3: 05_0098 – Landfill gas supply & Operability study

MOD 5: 05-0098 – Receival and processing of Liwuid waste comprising liquid organic waste and leachate.

1.5. Organisational Structure at SF ARRF



1.6. Risk Management

Risks to health, safety the environment and property which arise from operational acitivities are identified, assessed, controlled, reviewed and reported in line with applicable legislation in accordance with *Risk Management Procedure*.

1.7. Staffing and Training Requirements

The Site Manager ensures the provision of adequate training for workers on-site to ensure that all requirements described in this EMP are met. It is also the Site Manager's responsibility to provide adequate training to all workers performing critical tasks, such as inspection and direction of incoming wastes, operation of the equipment and environmental management on-site.

An environment, quality and safety system has been prepared and implemented by SUEZ. It is designed to provide SUEZ's employees with information about their environmental responsibilities which are outlined in the specific procedure or SOP.

1.8. Environmental Auditing and Review

SUEZ evaluates the performance of Spring Farm ARRF in accordance with *Management Systems Review Procedure*, *Monitoring and Measurement Procedure*, *Audit Procedure* and in conjunction with the annual return process required of the EPL. This annual return records complaints received, testing and activation of the Pollution Incident Response Management Plan (PIRMP), documenting the results of environmental

monitoring that has been conducted as a requirement of the EPL and recording non-compliances and remedial actions taken or proposed for the non-compliances.

1.9. Update and Version Control Requirements

This document is version controlled. All updates to this document must be made in accordance with the *Document Control Procedure*.

The Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this any regulatory approval. This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the Project.

2. Site Overview

2.1. Site Description and Layout

Spring Farm ARRF is located in the Camden Local Government Area. Access to the site is from Glenlee Road Spring Farm. Spring Farm Resource Recovery Facility is located on 36 hectares of land, some of which is a buffer zone between the Spring Farm Advance Resource Recovery Facility and adjacent housing.



Figure 2 Location and Site Context of Spring Farm ARRF

2.2. Infrastructure

The main components of the SFARRF site include:

- reception hall for Council & SUEZ vehicles
- separation hall
- transport area
- water treatment tank farm
- garden organics collection & sorting
- tunnel composting area
- administrative Buildings
- staff and Visitor Car Parking Areas
- amenities buildings
- maintenance workshop

Environmental Incident Management And Community Engagement



2.2.1. Hours of operation

Spring Farm ARRF operates to accommodate a Monday to Friday receiving pattern of waste:

The Proponent shall ensure that all waste to be processed at the site is received between the following hours:

- a) 7:00 am to 5:00 pm, Mondays to Fridays, inclusive;
- b) 8:00 am to 4:00 pm, Saturdays and Sundays; and
- c) 7:00 am to 2:00 pm on public holidays.

In accordance with the Environment Protection Licence, Spring Farm ARRF operates between the hours listed in **Appendix 2**.

2.2.2. Traffic management

Spring Farm ARRF assesses the risks and implements appropriate and effective traffic controls in accordance with the *Traffic Management Plan*. Council & SUEZ vehicles entering the facility must first report to the Spring Farm Resource recovery Park weighbridge to obtain a weighbridge docket. Vehicle details will be recorded at this point prior to diverting to SFARRF receipt or loading area.

A range of vehicles and mobile plant are used at SFARRF to conduct operations, including the transfer and transport of materials in and around the facility. Refer to the *Traffic Management Plan* for further details of traffic types and movements. All roads have been constructed to a standard so that they are accessible in all weather conditions.

2.2.3. Landscaping

Management of vegetation is conducted in accordance with the *Site Management – Infrastructure Facilities SOP*.

2.2.4. Drainage

All frequently trafficable areas are sealed which facilitates drainage control and minimises the potential for sediment mobilisation.

In accordance with requirements of the Development Consent, all areas involving the handling, treatment and storage of waste and outputs are directed to the first flush system. All above ground tanks at the Tank Farm have been designed and constructed so that the bunding of the tanks is a minimum of 110% of the tank volume in that bund.

The facility has also been designed and constructed so that the paved areas of the facility form a self bunded compound with water from the entire facility directed to the first flush system.

2.2.5. Security

The Spring Farm ARRT forms part of the Spring Farm Resource Recovery Park and as such a 2 meter high chain-wire fence surrounds the facility. The weigh bridge staff supervise the main entrance. All access gates are locked and on-site security is provided after hours.

Refer to the *Site Management – Infrastructure Facilities* for further information.

2.2.6. Services

The facility is connected to mains potable water, telephone and electricity systems. There is no onsite sewerage connection to the Spring Farm Resource Recovery Park and a site Bio Septic treatment plant, approved by council, has been installed to treat effluent.

For information on safely conducting work around utility services, refer to the *Utility Services SOP*.

2.3. Overview of Spring Farm ARRF Activities

Municipal solid wastes are deposited at the ARRF from Camden, Campbelltown, Wingecarribee and Wollondilly Council curbside collections.

Environmental Incident Management And Community Engagement



Waste segregation is an integral part of the entire resource recovery operation. These waste are primarily from curb side collection and council vehicles or approved providers of Commercial and Industrial wastes.

Materials requiring further processing delivered to the ARRF are tipped either into the garden organics receivables area or the receivable hall of the main ARRF building, depending on the waste materials.

3. Environmental Incident Management and Community Engagement

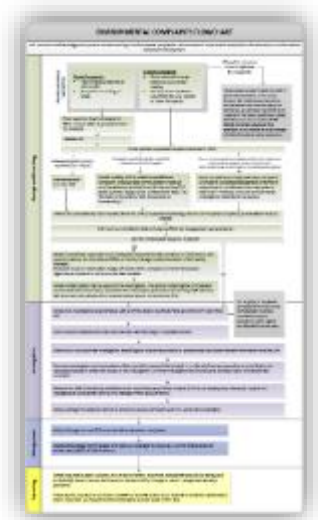
3.1. Environmental Incident Management

All environmental incidents are to be recorded in accordance with the *Incident Reporting and Corrective Action Procedure*. Environmental complaints are handled in accordance with *Environmental Complaints Management SOP*. Where a pollution incident occurs the Pollution Incident Response Management Plan (PIRMP) for SFARRF must be activated.

Note that all contact with a regulatory body must be approved by the relevant Site Manager or Business Line Manager.

3.1.1. Specific Requirements – Fire Incidents

All fire occurrences on site must be reported to the EPA as soon as practicable after workers become aware of the fire. An Environmental IIR must be recorded for every fire and an Environmental Incident Corrective Action Report (CAR) must be raised in accordance with the *Incident Reporting and Corrective Action Procedure*.



3.2. Community Complaints

A free call telephone line is operated on behalf of SUEZ. The telephone line, 1800 368 737, operates 24 hours a day, 7 days per week. Complaints about the development can be registered on this line. Complaints can also be lodged with the NSW EPA on 131 555 and also directly to the site management. The details of all complaints received and actions taken in response to the complaints are kept on the SUEZ database through the SIMS system. Complaints received via the hotline are investigated and responded to within the allocated time frame set out in *Environmental Complaints Management SOP*.

3.3. Community Reference Group

SFRRP has developed a Community Reference Group (CRG). Regular meetings are held with CRG members in attendance where current site operations and environmental reports on performance are discussed. Copies of CRG meeting minutes are published onto the Suez website.

3.4. Emergency Preparedness

In accordance with the *Emergency Management Procedure* an *Emergency Management Plan* (ERP) and PIRMP have been developed for Camden Organics.

Emergency drills are to be conducted in accordance with the *Emergency Management Procedure*. In the event of an emergency involving potential environmental damage the PIRMP must be activated. It is a requirement of the Protection of the Environment Operations Act (POEO Act) that the PIRMP is tested at least 12 monthly intervals.

4. Waste Acceptance, Stockpiling and Material Export

4.1. Wastes accepted at SFARRF

The ARRF is licenced to receive waste as defined in Schedule 1 of the Protection of the Environment Operations Act 2014 (POEO Act). Only the following waste types from the above schedule will be accepted for storage, processing and/or transfer:

- General Solid Waste (putrescible) for composting, resource recovery and waste processing (non-thermal treatment)
- General Solid Waste (non-putrescible) for composting, resource recovery and waste processing (non-thermal treatment)
- Leachate (non thermal treatment)
- Grease trap waste – Liquid (non thermal treatment)
- Liquid food waste K120 (non thermal treatment)
- General or Specific exempted waste for resource recovery that meets all the conditions of resource recovery exemption under Clause 51A of the Protection of the Environment Operations (Waste) Regulation 2014

Any other wastes received on site that are below the licensing thresholds in Schedule 1 of the POEO Act.

4.2. Excluded Materials

Any material that does not fall into the categories outlined 4.1 is not accepted. This includes, but is not limited to:

- Tree trunks and roots;
- Separated bricks, concrete, roof tiles, terracotta pipes;
- Mixed construction and demolition material;
- Large and shredded tyres;
- Expanded plastics e.g. polystyrene where the volume in the load is >50%;
- Security wastes e.g. expired food stock; and
- Special wastes e.g. Asbestos

Staff at the ARRF are responsible for monitoring and controlling the waste delivered to the site, and rejecting any substances that are not acceptable at the ARRF. This function is fulfilled by making enquiries concerning customer loads at the weighbridge, and visual monitoring during unloading etc. When contentious or ambiguous matters arise in the receipt or handling of any particular category of waste, the staff are required to seek direction from the Site Manager.

4.3. Acceptance of Waste

The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled "Description" in the table below. Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below. Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence. Refer to **Appendix 3**.

5. Environmental Management and Monitoring

All monitoring activities set out in this section must comply with the requirements of the *Monitoring and Measuring Procedure* and the *Incident Reporting and Corrective Actions Procedure*.



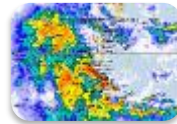
Leachate



Feedback & Complaints



Water



Weather



Air



Dust



Operational Conditions



Litter



Pests & Vermin

5.1. General

Environmental management (including operational requirements) and monitoring requirements for SFARRF are contained within the Environment Protection Licence, 12588. In line with the monitoring requirements set out in the site's licence, SFARRF conducts further monitoring (which is also outlined in this section) which may be used for management purposes on site.

Annual environmental management report (AEMR) will be submitted to Council & DoP and be publically available on the SUEZ website

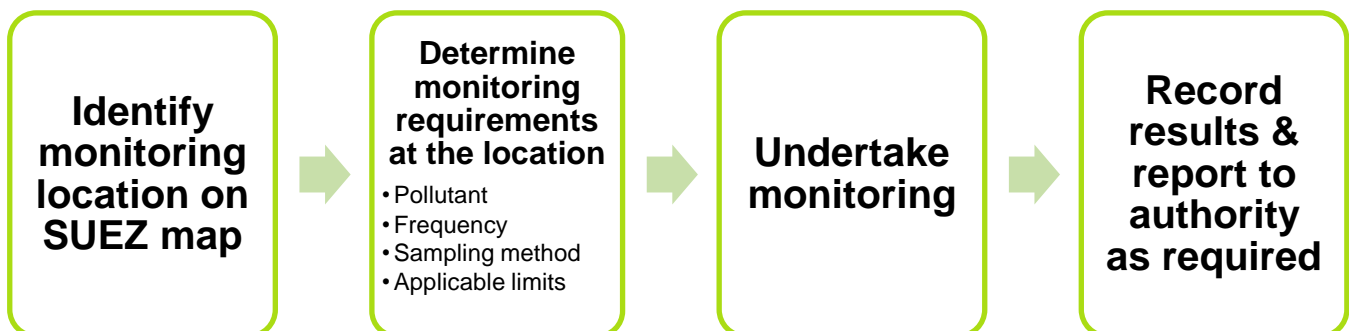


Figure 3 Summary of the monitoring process at SFRRP

The responsibilities of SUEZ workers are outlined within the relevant Standard Operating Procedures (SOPs) and Work Instructions (WIs) outlining the operations. The responsibilities of actions within this Environmental Management Plan fall to the Site Manager.

5.2. Records

All monitoring records referenced in this section must be maintained in accordance with the *Records Management Procedure* and:

- Be in a **legible form**, or in a form that can readily be reduced to a legible form;
- Kept for a least **4 years** after the monitoring or the event to which they relate took place; and
- Be able to be **produced** in a legible form **to any authorised officer of the EPA** who asks to see them.

All samples taken in this section must contain:

- The **date(s)** the sample was taken;
- The **time(s)** at which the sample was collected;
- The **point/location** at which the sample was taken; and
- The **name of the person** who collected the sample.

5.3. Limiting Conditions

All operations undertaken by SUEZ must **not** pollute land or waters. For details of the limiting conditions, refer to the relevant section which outlines the management of that particular issue.

5.4. Operational Requirements

At SUEZ, all activities must be carried out in a competent manner. This includes:

- The processing, handling, movement and storage of materials and substances used to carry out the activity;
- The treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

All the activities outlined above must be carried out in a manner that will prevent and minimise fire at the premises.

5.5. Leachate

The management of leachate is to be conducted in accordance with the requirements set out in the *Leachate Management SOP*. The purpose of effective leachate management is to ensure that leachate does not contaminate local water courses, ground water sources or stormwater which is discharged from the premises. Lowest concentrate leachate created from Stormwater falling onto material handling areas, vehicle movement areas and compost product stockpiles are treated through the first flush system.

5.6. Water

Water is to be managed in accordance with the requirements set out in the *Water Management SOP*. The purpose in managing and monitoring water onsite is to ensure that the local water courses, ground water sources or stormwater which is discharged from the premises are not contaminated due to the ARRF's activities.

5.6.1. Management Strategy

Rainwater harvesting is maximized with all water from the roof of the ARRT diverted to the onsite water storage tanks. Harvested water is used for various processes including cleaning of the facility and wash down areas.

In accordance with the requirements of the Development Consent all water from the ARRT is processed via a first flush system to remove contaminants prior to discharge to storm water channels.

5.6.1. Infrastructure and Collection

All storm water from paved areas is directed to first flush tank designed to capture contaminants from the water. The contents of the first flush tank are utilized onsite in processing to prevent offsite release of contaminants that are captured. In the event that the water is unable to be utilized onsite, the water is tankered to a licensed treatment facility.

5.7. Air and Dust

The management of dust is to be conducted in accordance with the requirements of the *Site Maintenance – Infrastructure Facilities*. The purpose of dust management is to ensure that neighbouring properties are not adversely affected by dust, from operations attributed to the ARRF.

5.7.1. Management Strategy

Potential dust nuisance during dry weather is controlled by regular wetting down of unsealed access and manoeuvring areas, as required. A water truck is maintained permanently on the site for this purpose as well as for fire control.

All areas including stockpiles and haul roads shall be operated so as to minimise dust nuisance. All materials delivered to the Garden Organics area received within the partially enclosed area. Processing of garden wastes at the Garden Organics area is conducted by slow speed shredder with dust suppression heads fitted to reduce dust emissions.

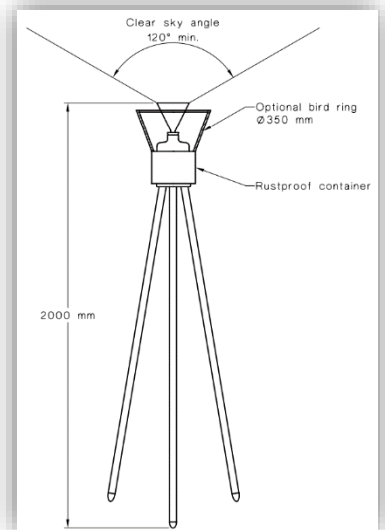
Should complaints be received from adjacent landowners then the Organics Manager shall give consideration to watering of the working area. All complaints are to be recorded into the SIMS system as per the requirements of *Incident Reporting and Corrective Action Procedure*.

5.7.2. Monitoring Sampling and Instructions

All monitoring must be undertaken in accordance with the requirements set out in AS/NZS 3580.10.1:2003 *methods for sampling and analysis of ambient air. Method 10.1: Determination of particulate matter—Deposited matter—Gravimetric method*.

Depositional dust gauges are located at the phone tower & Moyengully access gate. Monthly monitoring is undertaken by site Compliance officer to measure compliance of 4g/m²/month. Analysis is undertaken for combustible matter, total insoluble matter & total solids.

On completion of the Spring Farm housing development and new haul road in 2018 /2019, the depositional dust gauge will be reinstated on the corner of Lot 1076817.



5.8. Odour

The management of odour is to be conducted in accordance with the requirements set out in *Odour Management SOP*. The purpose in odour management is to prevent the degradation of local amenity from potential odour emissions or odourous activities associated with composting operations.

5.8.1. Management Strategy

The main sources of odour emissions from the ARRF & composting facility is the breakdown of material. The odour from the composting area can be described as an “earthy” smell and is a mixture of water vapour and gases. Unpleasant smells are only generated if conditions and waste turn around is not managed. The principal management control methods used to avoid offensive odours shall be:

Controls used to minimise odour include:

- Removal of material from the reception waste hall
- Odour suppression sprinkler system
- Air exhaust system
- Automated door closure
- Closed top tanks
- Shredding material on a first received, first shredded basis
- Correlation of any odour complaints with weather conditions and site activities

5.9. Litter

The management of litter is to be conducted in accordance with the requirements of the *Site Maintenance – Infrastructure Facilities SOP*. The purpose for control and management of litter is to ensure that local amenity is not affected from wind blown litter.

5.9.1. Management Strategy

In most cases, airborne litter at SFARRF is minimised by control and expeditious removal of non-complying waste from the organic waste stream.

Minor quantities of litter which escape and blow around the site are to be recovered by litter "pickers" who patrol the site and boundaries recovering such material as required.

5.10. Noise

The management of noise is to be conducted in accordance with the requirements of the *Site Maintenance – Infrastructure Facilities SOP*. The purpose of noise management is to ensure that no loss of amenity is caused to neighbours from noisy operations associated with the organics facility. Independent noise monitoring will be conducted annually. Noise from the premises will be measured at the most affected point within the residential boundary, or at the most affected point within 30 meters of the dwelling where the dwelling is more than 30 meters from the boundary, to determine compliance with the noise levels in the licence.

Annual monitoring results will be sent to the EPA.

5.10.1. Management Strategy

In accordance with the EPL, unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises. The following general measures are taken to reduce noise onsite:

- The use of appropriate and well-maintained machinery manufactured to appropriate design specifications
- Process activities conducted during specified operating hours.

In addition, vehicles entering the site must adopt the following measures to ensure noise is minimised by restricting the number of waste transport vehicles in operation during the early hours of the day:

- All vehicles are to limit the use compression breaking;
- All vehicles are required to adhere to site sign posted speed limits; and
- All vehicles are to be operated between the allowed hours of operations.

5.11. Pests and Vermin Control

The management of pests and vermin is to be conducted in accordance with the requirements of the *Site Maintenance – Infrastructure Facilities SOP*. The purpose of pest and vermin management is to reduce the impact on amenity to neighbours and the community caused from the attraction of vermin and pests to waste materials.

5.11.1. Management Strategy

These are operated as part of the overall site management strategy.

- Pest control contractor engaged
- Rat and mouse baiting
- Feral cat control

The following items may be implemented if a pests and vermin become a continuing risk on site.

- Distress tapes.
- Avitrol poisoning.
- Racket bombs.
- Wire grid system.

A combination of weekly, monthly and 6 monthly monitoring will be conducted in accordance with the *Monitoring and Measurements Procedure* and records retained on the applicable *Inspection Checklist*.

5.12. Vegetation

Vegetation Management is to be conducted in accordance with the requirements of the *Site Maintenance – Infrastructure Facilities SOP*. The purpose of appropriate vegetation management is to ensure that no weed outbreaks occur to local areas due to waste placement activities of the facility.

5.12.1. Management Strategy

The following activities will be utilised to monitor and maintain vegetation:

- Regular inspection of grassed areas for weed infestations;
- Regular maintenance of rehabilitated areas;
- Regular inspection and maintenance of the riparian zone;
- Planted areas will be regularly inspected, where depressions are noted these will be filled, reseeded and mulched
 - Revegetation and plantings will be, where possible, indigenous climaxed species amongst established colonised species.

5.13. Weather

SUEZ records and monitors the following items in accordance with the conditions outlined in the EPL:

- a) The daily wind speed and direction; and
- b) Daily rainfall

All records are maintained in accordance with the *Records Management SOP*.

5.14. Product Quality

Please refer to MAN016, Product Quality Manual for all product quality procedures and details.

6. Definitions

Leachate – Means a liquid that has percolated through and/or been generated by decomposition of waste material. It includes water that comes into contact with waste and is potentially contaminated by nutrients, metals, salts and other soluble or suspended components and/or products of decomposition of the waste.

Act – Means the Protection of the Environment Operations Act 1997

Asbestos – means the fibrous form of mineral silicates belonging to the serpentine and amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos), tremolite, or any mixture containing one or more of the mineral silicates belonging to the serpentine and amphibole groups.

Greenwaste – means the vegetative portion of the waste stream arising from various sources including waste from domestic and commercial premises and municipal operations.

EPA – Means Environment Protection Authority of New South Wales.

7. Related Documents

DOCUMENT NAME	REFERENCE
Environment Policy	POL001
Legislative and Other Requirements	PROC001
Legislative Register – Environmental	REG005
Site Document Manifest	REG013
Document Control Procedure	PROC004
Emergency Response Plan	PLANS003
Traffic Management Plan	PLANS002
Site Management – Infrastructure Facilities	SOP041
Utility Services	SOP102
Environmental Complaints Management	SOP066
Incident Reporting and Corrective Action Procedure	PROC008
Waste Acceptance Manual	MAN011
Monitoring and Measuring Procedure	PROC007
Leachate Management	SOP029
Contractor and Visitor Control Procedure	PROC013
Records Management	PROC009
Contractor and Visitor Control Procedure	PROC013
Water Management	SOP069
Odour Management	SOP065
Snakes, Spiders, Ticks and Fire Ants	SOP054
Emergency Management	PROC005
Emergency Management Plan	PLANS003
Management Systems Review	PROC012
Audit Procedure	PROC010
SFRRF Odour Management Plan	PLANS004
SFRRF Vegetation Management Plan	PLANS004

8. Review and Document Control

VERSION	CHANGE	REVIEWED	AUTHORISED	DATE ISSUED
1	Initial Issue	-	-	20 October 2013
2	Redevelopment	R Georges	-	REVIEW PROCESS
3	Template update	Kelly Gee	Pat Keating	May 2016
4	Review and update	M Stojanoski	Int Sys Mgr	19/12/16
5	Content update and appendix added	K.Gee M Stojanoski	Nat EQS Mgr	February 2018
6	Update ISO dates	K. Gee	Nat EQS Mgr	10/10/18

APPENDIX 1. - Current environmental protection licence

Summary Licence No: 12588

[View this licence](#) (PDF document 235 kb)

Licence holder: SUEZ RECYCLING & RECOVERY PTY LTD
Premises: ECOLIBRIUM MIXED WASTE AND ORGANICS FACILITY
 Richardson Road, SPRING FARM, NSW, 2570
LGA: CAMDEN **Catchment:** Hawkesbury
Administrative fee: \$6,250.00
Licence status: Issued
Activity type: Non-thermal treatment of liquid waste
 Generation of electrical power otherwise than from coal, diesel or gas
 Composting
 Non-thermal treatment of general waste
 Recovery of general waste
Licence review: Complete date 08 Apr 2013
 Due date 08 Apr 2018
Pollution incident management plan: Last tested 09 Apr 2015
Current Environmental Risk Level: Level 1

APPENDIX 2. - Hours of operation at Spring Farm ARRF

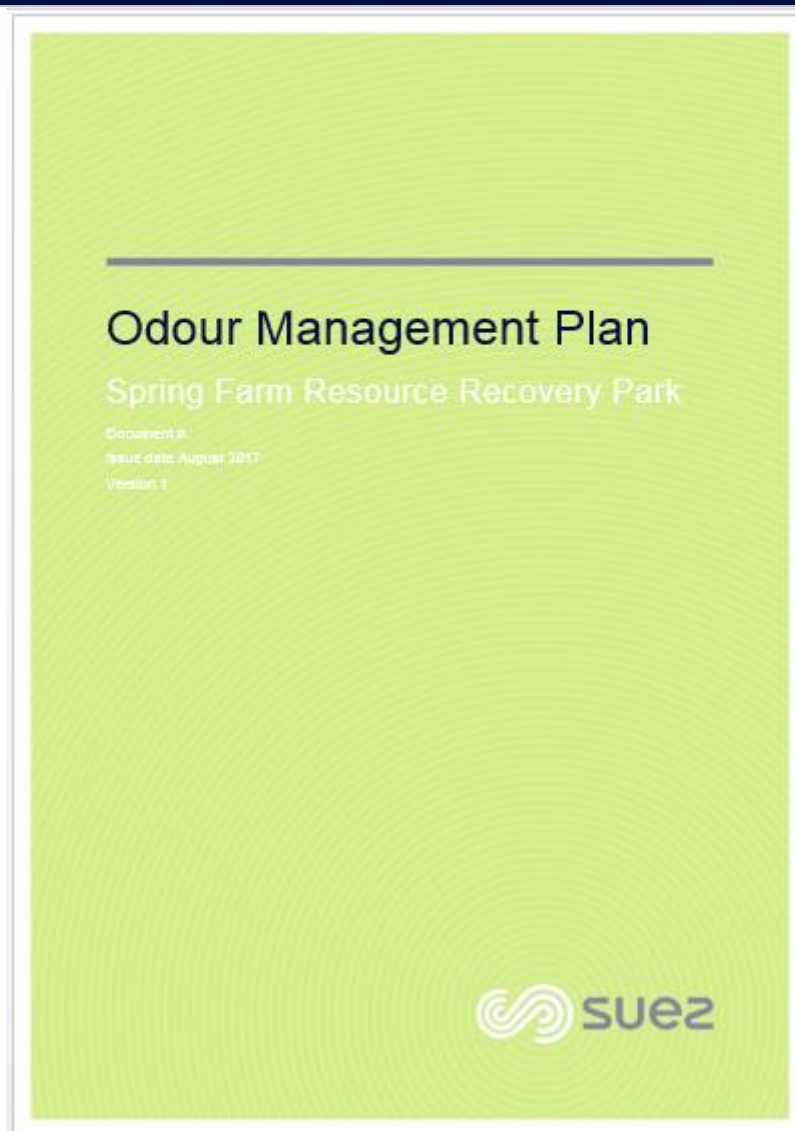
Activity	Day	Hours
Waste acceptance	Monday to Friday	7:00AM to 4:00PM
Waste processing	Monday - Sunday	6:00AM to 6:00PM



APPENDIX 3. - Waste accepted at SFARRF

Code	Waste	Description	Activity	Other Limits
NA	Leachate	Leachate from other SUEZ's licensed waste facilities	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and leachate combined, received at the premises must not exceed 520 cubic metres per day.
NA	Grease Trap Waste (Liquid)	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and leachate combined, received at the premises must not exceed 520 cubic metres per day.
K120	Liquid Food Waste	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	The maximum quantity of liquid food waste, grease trap waste and leachate combined, received at the premises must not exceed 520 cubic metres per day.
NA	General solid waste (putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Composting Resource recovery Waste processing (non-thermal treatment)	NA
NA	General solid waste (non-putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Composting Resource recovery Waste processing (non-thermal treatment)	NA

Source: Environment Protection Licence, 5647

Licence version date: 01 April 2016







WSN ENVIRONMENTAL SOLUTIONS

Macarthur Resource Recovery Park –
Ecolibrium Mixed Waste and Organics Facility

Operational Environmental Management Plan

JUNE 2003

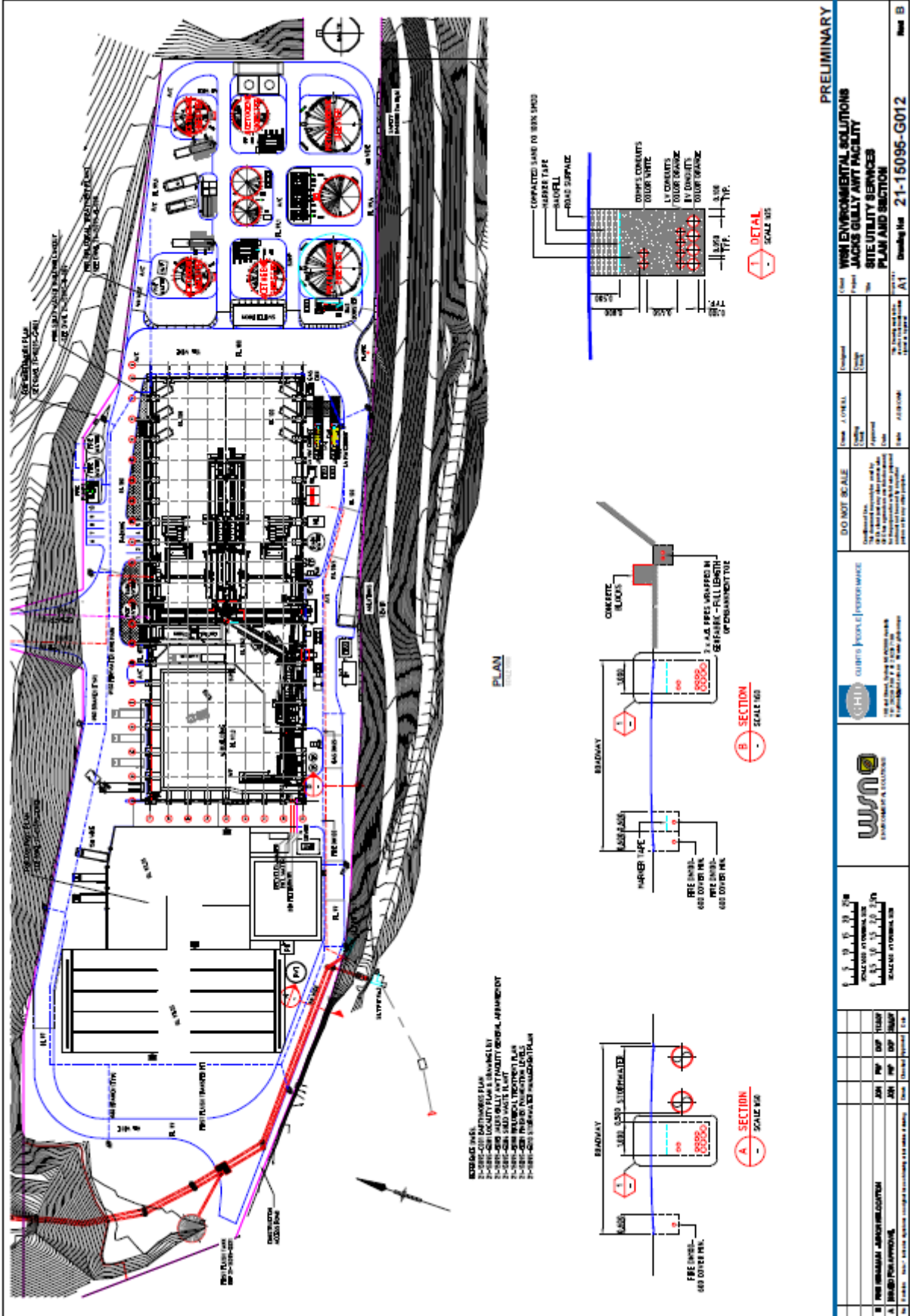


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Our Reference: P5529

Page 1



Vegetation Management Plan

Spring Farm Resource Recovery Park

Document #:

issue date October 2017

Version 1



APPENDIX F SUEZ COMPLAINTS REGISTER

Site	Company	Incident Type	Incident Date	Incident Time	Location of Complaint	Complaint Received By	Details
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	23/01/2019	-	Not Available	NSW EPA	Odour complaint received from EPA 25 Januray 2019
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	4/02/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	19/02/2019	-	Not Available	NSW EPA Officers	NSW EPA Officers conducted offsite odour survey and attributed odours to the Sites green waste.
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	26/02/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	26/02/2019	-	Not Available	Camden Council	Odour complaint notification from Camden Council following resident complaint
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	26/02/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	4/03/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	14/03/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	3/04/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	11/04/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	13/05/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA following resident complaint
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	15/05/2019	-	Not Available	NSW EPA; SUEZ Australia Pty Ltd - Hotline	Odour complaint notification from EPA
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	23/05/2019	-	Camden LGA suburbs	SUEZ Australia Pty Ltd - Hotline	Odour complaint notification from EPA and SUEZ Australia Pty Ltd - Hotline
Spring Farm ARRF	SUEZ Australia Pty Ltd	Odour	23/05/2019	-	Not Available	NSW EPA	Odour complaint notification from EPA following resident complaint

APPENDIX G SITE WEATHER DATA



Site Name	Date	Average Air Temperature (°C)	Average Relative Humidity (%)	Average Wind Direction (°)	Average Wind Speed (km/h)	Total Rain Gauge (mm)
SUEZ Spring Farm	10/10/2018	19.4	66.9	165.4	9.6	0
SUEZ Spring Farm	11/10/2018	12.7	77.3	171.4	12.6	3.6
SUEZ Spring Farm	12/10/2018	13.1	80.19	166.4	10.5	0.4
SUEZ Spring Farm	13/10/2018	13.2	82.49	150.6	10.1	0.8
SUEZ Spring Farm	14/10/2018	15.7	83.25	92.7	12	17.8
SUEZ Spring Farm	15/10/2018	16	86.84	108.4	12.6	1.4
SUEZ Spring Farm	16/10/2018	17.3	87.86	64.9	13.6	1.2
SUEZ Spring Farm	17/10/2018	18.6	82.11	91.1	13.4	0.2
SUEZ Spring Farm	18/10/2018	18.1	89.65	158.6	6.7	15
SUEZ Spring Farm	19/10/2018	18.9	89.2	103.9	7.8	3.2
SUEZ Spring Farm	20/10/2018	21.4	73.17	133.8	9.1	0
SUEZ Spring Farm	21/10/2018	19.9	83.74	150.1	7.4	2.2
SUEZ Spring Farm	22/10/2018	16.1	79.84	157.9	7	0
SUEZ Spring Farm	23/10/2018	18.2	80.63	103.9	9.7	0
SUEZ Spring Farm	24/10/2018	21	71.81	132.5	11.8	0
SUEZ Spring Farm	25/10/2018	15.5	73.07	187.3	10.5	0
SUEZ Spring Farm	26/10/2018	17.3	75.69	138.6	10.2	0
SUEZ Spring Farm	27/10/2018	17.6	71.85	159.4	9.3	0
SUEZ Spring Farm	28/10/2018	19.3	69.46	149.4	11	0
SUEZ Spring Farm	29/10/2018	16.4	66.7	115.3	8.4	0
SUEZ Spring Farm	30/10/2018	16.7	72.05	94.1	8.7	0
SUEZ Spring Farm	31/10/2018	20.6	64.07	122.3	11.6	0
SUEZ Spring Farm	1/11/2018	21.2	68.84	143.8	8.5	0
SUEZ Spring Farm	2/11/2018	23.6	71.53	123.6	8.6	0
SUEZ Spring Farm	3/11/2018	27.7	52.41	245.1	20.6	4.2
SUEZ Spring Farm	4/11/2018	22.2	65.06	167.9	11.7	0
SUEZ Spring Farm	5/11/2018	20.8	75.41	120.8	10.5	0
SUEZ Spring Farm	6/11/2018	24	61.51	186.4	6.8	0
SUEZ Spring Farm	7/11/2018	26.3	53.28	194.8	8.5	0
SUEZ Spring Farm	8/11/2018	16.2	82.22	141.6	12.8	10.4
SUEZ Spring Farm	9/11/2018	14	65.44	158.1	11.2	0
SUEZ Spring Farm	10/11/2018	16.1	66.5	115.8	11.7	0
SUEZ Spring Farm	11/11/2018	16	69.3	138.7	10.5	0
SUEZ Spring Farm	12/11/2018	17.8	69.39	118.1	11.9	0
SUEZ Spring Farm	13/11/2018	19.2	70.44	81.5	9.9	0
SUEZ Spring Farm	14/11/2018	20.7	71.31	89.5	11.6	0.2
SUEZ Spring Farm	15/11/2018	18.9	86.65	143.6	7.6	0.6
SUEZ Spring Farm	16/11/2018	16.9	82	185.3	11.1	6.8
SUEZ Spring Farm	17/11/2018	15.4	82.5	143.9	7.8	0
SUEZ Spring Farm	18/11/2018	17	76.41	163.8	11.6	0
SUEZ Spring Farm	19/11/2018	16.3	74.9	139.2	11.8	0
SUEZ Spring Farm	20/11/2018	17.6	72.23	105.6	9.6	0
SUEZ Spring Farm	21/11/2018	21.8	68.45	100.3	11.2	1
SUEZ Spring Farm	22/11/2018	22.1	70.32	220	12	2.4
SUEZ Spring Farm	23/11/2018	17.6	44.1	261.5	29.4	0.4
SUEZ Spring Farm	24/11/2018	18	43.1	249.7	31.5	0.4
SUEZ Spring Farm	25/11/2018	18.3	53.93	207.5	15.8	0
SUEZ Spring Farm	26/11/2018	18.6	60.15	177.1	11.4	0
SUEZ Spring Farm	27/11/2018	19.1	67.79	161.4	9.4	0
SUEZ Spring Farm	28/11/2018	20.2	75.1	77.1	13	13.4
SUEZ Spring Farm	29/11/2018	15.6	83.85	204.8	18.6	2.8
SUEZ Spring Farm	30/11/2018	17.8	73.85	185.5	12.4	0
SUEZ Spring Farm	1/12/2018	19.5	73.5	153	8.7	0
SUEZ Spring Farm	2/12/2018	21	75.71	125	9.6	0
SUEZ Spring Farm	3/12/2018	21.8	61.5	205.8	16.6	0.2
SUEZ Spring Farm	4/12/2018	23.7	39.18	229	15	0
SUEZ Spring Farm	5/12/2018	18.2	80.45	123.5	10.4	1.4
SUEZ Spring Farm	6/12/2018	17.6	82.07	114.4	7.4	1.2
SUEZ Spring Farm	7/12/2018	19.7	69.97	77.5	11.9	0
SUEZ Spring Farm	8/12/2018	20.9	68.26	94	12.7	0
SUEZ Spring Farm	9/12/2018	22.2	70.68	100.9	10.2	0
SUEZ Spring Farm	10/12/2018	24	69.87	119.9	10	0
SUEZ Spring Farm	11/12/2018	21.6	74.87	163.2	7.7	0
SUEZ Spring Farm	12/12/2018	20	70.09	130.3	7.4	0
SUEZ Spring Farm	13/12/2018	20.1	85.8	84.2	10	1.6
SUEZ Spring Farm	14/12/2018	20.3	90.71	154.8	8.1	37.6
SUEZ Spring Farm	15/12/2018	21	93.81	138.5	5.8	28.4
SUEZ Spring Farm	16/12/2018	22.3	86.63	124.2	9.6	24.8
SUEZ Spring Farm	17/12/2018	23.8	78.05	137.5	11.9	33.8
SUEZ Spring Farm	18/12/2018	24	68.55	159.6	8.5	0
SUEZ Spring Farm	19/12/2018	22.1	80.95	161.3	9.3	0
SUEZ Spring Farm	20/12/2018	20.5	91.44	147	5.6	1.4
SUEZ Spring Farm	21/12/2018	20.6	81.39	182.3	10.5	3.6
SUEZ Spring Farm	22/12/2018	18.1	86.89	168.9	8.9	0.8
SUEZ Spring Farm	23/12/2018	16.9	76.47	196.7	11.8	0
SUEZ Spring Farm	24/12/2018	17.5	74.16	145.2	10.2	0
SUEZ Spring Farm	25/12/2018	20.6	72.93	108.1	10.3	0
SUEZ Spring Farm	26/12/2018	24	59.9	128.4	9.7	0
SUEZ Spring Farm	27/12/2018	24.7	60.17	115.8	10.2	0
SUEZ Spring Farm	28/12/2018	26	54.68	112.8	10.2	0
SUEZ Spring Farm	29/12/2018	27.5	57.24	92.4	9.9	0
SUEZ Spring Farm	30/12/2018	26.3	66.97	150.9	8.5	0
SUEZ Spring Farm	31/12/2018	26.7	59.98	133.2	8.4	0
SUEZ Spring Farm	1/01/2019	25.4	68.61	166.2	8.6	5.2
SUEZ Spring Farm	2/01/2019	27	59.24	121	10.2	0
SUEZ Spring Farm	3/01/2019	24.8	74.35	136.8	9.2	0
SUEZ Spring Farm	4/01/2019	23.8	76.45	117.8	9.1	0
SUEZ Spring Farm	5/01/2019	27.2	63.4	114.9	9.9	0
SUEZ Spring Farm	6/01/2019	23.3	77.07	180.5	13	6.4
SUEZ Spring Farm	7/01/2019	18.7	85.09	182.3	7.1	0
SUEZ Spring Farm	8/01/2019	20.8	89.58	98.3	6.8	0.2
SUEZ Spring Farm	9/01/2019	24.1	81.16	154.1	9.4	8.4
SUEZ Spring Farm	10/01/2019	22.9	82.27	164.6	9	0.2
SUEZ Spring Farm	11/01/2019	20.4	89.78	180.3	6.6	1.2
SUEZ Spring Farm	12/01/2019	21.9	87.25	141.7	9.3	12.8
SUEZ Spring Farm	13/01/2019	25.9	72.65	151.6	8.6	0
SUEZ Spring Farm	14/01/2019	22.7	79.95	157.1	6.5	0
SUEZ Spring Farm	15/01/2019	24.4	74.62	111.8	10.8	0
SUEZ Spring Farm	16/01/2019	26.8	72.15	112.2	8.9	0
SUEZ Spring Farm	17/01/2019	28.4	69.2	139.8	7.9	0
SUEZ Spring Farm	18/01/2019	28.2	63.73	115.6	11.3	0
SUEZ Spring Farm	19/01/2019	29.4	60.06	142.3	9.7	0
SUEZ Spring Farm	20/01/2019	22.2	79.32	157.6	9.2	0
SUEZ Spring Farm	21/01/2019	22.5	83.97	115.9	9.2	1.2
SUEZ Spring Farm	22/01/2019	22.6	92.47	137.4	4.8	8.6
SUEZ Spring Farm	23/01/2019	26.4	73.5	117.8	8.9	0



Site Name	Date	Average Air Temperature (°C)	Average Relative Humidity (%)	Average Wind Direction (°)	Average Wind Speed (km/h)	Total Rain Gauge (mm)
SUEZ Spring Farm	24/01/2019	25.2	65.5	165.3	11.8	0
SUEZ Spring Farm	25/01/2019	24.8	74.87	142	6.9	0
SUEZ Spring Farm	26/01/2019	28.3	69.88	119.6	10.4	0
SUEZ Spring Farm	27/01/2019	28	70.57	117.2	9.6	0
SUEZ Spring Farm	28/01/2019	25.8	81.39	166.3	10.4	33
SUEZ Spring Farm	29/01/2019	24.7	83.25	83.3	8.5	0
SUEZ Spring Farm	30/01/2019	26	77.53	113.9	7.7	0
SUEZ Spring Farm	31/01/2019	26.4	76.42	106.3	7	0
SUEZ Spring Farm	1/02/2019	25.3	65.06	181.1	13.5	0
SUEZ Spring Farm	2/02/2019	19.1	87.43	185.4	7.2	1.2
SUEZ Spring Farm	3/02/2019	22.5	89.84	74.9	8.9	0
SUEZ Spring Farm	4/02/2019	25.3	71.02	115.5	11.1	0
SUEZ Spring Farm	5/02/2019	26.5	69.23	151.8	8.6	0
SUEZ Spring Farm	6/02/2019	23.2	86.64	116.5	8.1	1.2
SUEZ Spring Farm	7/02/2019	24.7	73.96	63.5	12.1	0
SUEZ Spring Farm	8/02/2019	24.8	73.57	115.6	11.4	0.6
SUEZ Spring Farm	9/02/2019	23.7	78.54	164.3	9.1	9.2
SUEZ Spring Farm	10/02/2019	22.2	62.07	209.1	15.1	0
SUEZ Spring Farm	11/02/2019	19	63.04	160.9	10.5	0
SUEZ Spring Farm	12/02/2019	22.5	70.15	130.9	10.1	0
SUEZ Spring Farm	13/02/2019	26.9	45.52	205.9	18.1	0
SUEZ Spring Farm	14/02/2019	19.9	57.47	183.1	12	0
SUEZ Spring Farm	15/02/2019	19.8	66.73	96.3	10.5	0
SUEZ Spring Farm	16/02/2019	20.8	65.14	111.8	10.3	0
SUEZ Spring Farm	17/02/2019	22.1	68.19	96.4	10.5	0
SUEZ Spring Farm	18/02/2019	24.1	63.1	117.4	10.5	0
SUEZ Spring Farm	19/02/2019	27.4	53.98	108.7	11.2	0
SUEZ Spring Farm	20/02/2019	22.2	74.35	180.8	12.4	2.4
SUEZ Spring Farm	21/02/2019	20.6	86.76	172.4	7.5	0.2
SUEZ Spring Farm	22/02/2019	20.4	80.29	156.9	10.1	1
SUEZ Spring Farm	23/02/2019	19.1	75.87	169.1	12.3	0.8
SUEZ Spring Farm	24/02/2019	20.2	70.65	172.7	13	0.8
SUEZ Spring Farm	25/02/2019	19.4	70.24	160.7	11.4	0
SUEZ Spring Farm	26/02/2019	19.4	70.33	116.7	9.2	0
SUEZ Spring Farm	27/02/2019	22.2	65.89	122.3	10.6	0
SUEZ Spring Farm	28/02/2019	22.3	74.1	159.1	10.1	0
SUEZ Spring Farm	1/03/2019	23.2	68.81	113	10.1	0
SUEZ Spring Farm	2/03/2019	23.1	74.98	99.5	11.1	1.4
SUEZ Spring Farm	3/03/2019	22.5	72.51	110.9	10.8	0
SUEZ Spring Farm	4/03/2019	23.1	73.97	97.1	10.7	0
SUEZ Spring Farm	5/03/2019	24.5	72.51	76.5	10.8	0
SUEZ Spring Farm	6/03/2019	24.4	72.92	107.7	8.2	0
SUEZ Spring Farm	7/03/2019	21.1	61.31	205.1	14.4	0
SUEZ Spring Farm	8/03/2019	19.2	64.42	134.3	7.1	0
SUEZ Spring Farm	9/03/2019	23.5	72.58	125.6	10.7	0
SUEZ Spring Farm	10/03/2019	20.9	82.65	147.1	6.1	0
SUEZ Spring Farm	11/03/2019	26.1	59.99	144.6	10.2	0
SUEZ Spring Farm	12/03/2019	23.5	72.91	113	9	0
SUEZ Spring Farm	13/03/2019	24.9	58.17	196.4	13.2	0
SUEZ Spring Farm	14/03/2019	19.8	83.08	140.4	6.3	1.6
SUEZ Spring Farm	15/03/2019	19.1	91.27	160.4	8.2	29.4
SUEZ Spring Farm	16/03/2019	19.1	81.09	189	10.8	3.8
SUEZ Spring Farm	17/03/2019	19	91.56	177.8	10.4	29.4
SUEZ Spring Farm	18/03/2019	17.6	95.16	234.6	11.1	32.2
SUEZ Spring Farm	19/03/2019	18.6	93.1	189.9	6.2	2
SUEZ Spring Farm	20/03/2019	20.5	86.81	171.2	8.6	0.8
SUEZ Spring Farm	21/03/2019	21	85.83	161.8	7.7	0.4
SUEZ Spring Farm	22/03/2019	21	85.36	154.7	8.4	0
SUEZ Spring Farm	23/03/2019	20.4	82.59	228.9	5.7	0
SUEZ Spring Farm	24/03/2019	21.9	83.89	171.5	6.6	0.8
SUEZ Spring Farm	25/03/2019	23.5	78.89	184.8	9.2	2.8
SUEZ Spring Farm	26/03/2019	19.8	73.11	230	13.9	0
SUEZ Spring Farm	27/03/2019	16.7	64.11	196.3	12.1	0
SUEZ Spring Farm	28/03/2019	17.7	79.37	143.9	7.7	0
SUEZ Spring Farm	29/03/2019	19.7	73.49	113.6	9.5	0
SUEZ Spring Farm	30/03/2019	21.4	77.95	137.1	8.1	19.8
SUEZ Spring Farm	31/03/2019	14.5	65.06	247.9	23.5	4.6
SUEZ Spring Farm	1/04/2019	14.6	65.55	208	16.1	0
SUEZ Spring Farm	2/04/2019	16.2	80.5	164.2	8.9	0
SUEZ Spring Farm	3/04/2019	16.7	88.99	170.3	7.7	1.2
SUEZ Spring Farm	4/04/2019	19.5	78.2	139.7	8.4	0
SUEZ Spring Farm	5/04/2019	18.2	87.77	187.8	7.3	2.2
SUEZ Spring Farm	6/04/2019	17.4	91.01	174.6	5.6	0.6
SUEZ Spring Farm	7/04/2019	20.2	83.56	142.9	7.3	0
SUEZ Spring Farm	8/04/2019	20.2	81.35	133.1	7.7	0.2
SUEZ Spring Farm	9/04/2019	23.2	48.79	205.6	9.9	0
SUEZ Spring Farm	10/04/2019	16.2	72.28	211.7	11.8	0
SUEZ Spring Farm	11/04/2019	13.4	72.91	165.3	9.2	0
SUEZ Spring Farm	12/04/2019	15.4	79.08	153.2	6.9	0
SUEZ Spring Farm	13/04/2019	16.3	78.75	146.4	8.6	0
SUEZ Spring Farm	14/04/2019	18.2	72.3	171.2	7.4	0
SUEZ Spring Farm	15/04/2019	16.3	79.93	156	9.9	0
SUEZ Spring Farm	16/04/2019	16.4	80.19	154.4	9.2	0
SUEZ Spring Farm	17/04/2019	17.2	82.32	144.5	9.7	0.2
SUEZ Spring Farm	18/04/2019	17.8	80.29	148.3	8.3	0
SUEZ Spring Farm	19/04/2019	19.9	76.14	149	7.1	0
SUEZ Spring Farm	20/04/2019	18.6	82.15	131	8.2	0
SUEZ Spring Farm	21/04/2019	20.2	85.01	127.6	6.9	0.6
SUEZ Spring Farm	22/04/2019	19.8	84.59	110.7	7.8	0
SUEZ Spring Farm	23/04/2019	20	81.24	131.2	8.7	0
SUEZ Spring Farm	24/04/2019	18.8	86.62	134	8.8	0.2
SUEZ Spring Farm	25/04/2019	18.6	76.86	110.3	8.8	0
SUEZ Spring Farm	26/04/2019	19.4	79.45	172.3	6.7	0
SUEZ Spring Farm	27/04/2019	18.6	48.21	228.3	15.5	0
SUEZ Spring Farm	28/04/2019	12.1	68.35	156.9	8.9	0
SUEZ Spring Farm	29/04/2019	14.8	60.94	171.7	9.7	0
SUEZ Spring Farm	30/04/2019	15.6	81.45	134.2	8.7	0
SUEZ Spring Farm	1/05/2019	18.2	80.61	98.5	9.5	0
SUEZ Spring Farm	2/05/2019	18.3	83.24	111.9	8.3	0
SUEZ Spring Farm	3/05/2019	19.2	85.37	99.2	5.6	0
SUEZ Spring Farm	4/05/2019	17	91.34	178.8	8.3	9.8
SUEZ Spring Farm	5/05/2019	14.7	70.19	193.4	10.7	0
SUEZ Spring Farm	6/05/2019	13.9	74.05	214.1	15.1	0.8
SUEZ Spring Farm	7/05/2019	12.6	71.54	176.9	11	0
SUEZ Spring Farm	8/05/2019	13.5	65.88	215.7	6.5	0
SUEZ Spring Farm	9/05/2019	12.4	63.11	218	15.6	0.2



Site Name	Date	Average Air Temperature (°C)	Average Relative Humidity (%)	Average Wind Direction (°)	Average Wind Speed (km/h)	Total Rain Gauge (mm)
SUEZ Spring Farm	10/05/2019	12.3	71.36	124.4	5.7	0
SUEZ Spring Farm	11/05/2019	11.3	71.82	253.3	12.2	1
SUEZ Spring Farm	12/05/2019	12.5	66.53	199.5	16	0
SUEZ Spring Farm	13/05/2019	12.6	74.22	158.6	9.5	0
SUEZ Spring Farm	14/05/2019	14.9	80.61	126.4	8.9	0
SUEZ Spring Farm	15/05/2019	13.9	78.69	171.6	9.5	0
SUEZ Spring Farm	16/05/2019	14.8	80.84	141	9.6	0
SUEZ Spring Farm	17/05/2019	14.1	77.35	138.7	10.2	0
SUEZ Spring Farm	18/05/2019	14.8	78.28	142.4	8.8	0
SUEZ Spring Farm	19/05/2019	15.5	83.42	159.3	8.2	0
SUEZ Spring Farm	20/05/2019	15.6	80.15	139.4	8.4	0
SUEZ Spring Farm	21/05/2019	14.8	81.33	131.9	8	0
SUEZ Spring Farm	22/05/2019	17.5	67.87	177.5	9.3	0
SUEZ Spring Farm	23/05/2019	16.4	78.99	156	9.2	0
SUEZ Spring Farm	24/05/2019	15.6	83.56	145.9	7.9	0
SUEZ Spring Farm	25/05/2019	14.9	67.98	208.9	8	0.2
SUEZ Spring Farm	26/05/2019	16.1	58.44	197.2	7.4	0
SUEZ Spring Farm	27/05/2019	13.5	57.59	249.2	9.9	0
SUEZ Spring Farm	28/05/2019	11.2	52.83	256.9	22.2	0.2
SUEZ Spring Farm	29/05/2019	12.6	54.03	227.3	16.7	0
SUEZ Spring Farm	30/05/2019	11.6	52.32	256.5	18.5	0
SUEZ Spring Farm	31/05/2019	8.9	59.58	220.4	14.4	0
SUEZ Spring Farm	1/06/2019	12.2	63.97	226.6	11.2	0
SUEZ Spring Farm	2/06/2019	11.9	77.45	182.9	8.7	0
SUEZ Spring Farm	3/06/2019	12.8	82.75	163.3	6.7	0
SUEZ Spring Farm	4/06/2019	10.9	68.82	227.9	16.5	16.6
SUEZ Spring Farm	5/06/2019	9.9	80.22	216.9	22.6	5
SUEZ Spring Farm	6/06/2019	8.9	80.56	190.4	10.8	0.2
SUEZ Spring Farm	7/06/2019	11.3	71.53	192	6.9	0
SUEZ Spring Farm	8/06/2019	12.7	84.72	172.1	7	0
SUEZ Spring Farm	9/06/2019	10.8	94.01	169.8	4.5	0.2
SUEZ Spring Farm	10/06/2019	13.2	80.18	193.3	8.2	0
SUEZ Spring Farm	11/06/2019	14.1	78.77	177.3	8.2	0
SUEZ Spring Farm	12/06/2019	13.3	79.91	154.2	9.4	0
SUEZ Spring Farm	13/06/2019	14.9	79.63	129.7	6.4	0
SUEZ Spring Farm	14/06/2019	13.6	68.44	193.3	10.9	0
SUEZ Spring Farm	15/06/2019	11.6	68.64	203.1	10.6	0
SUEZ Spring Farm	16/06/2019	13.2	76	190.4	5.7	3
SUEZ Spring Farm	17/06/2019	11.3	93.84	213	8.6	16.8
SUEZ Spring Farm	18/06/2019	12	84.77	187.7	11.4	0
SUEZ Spring Farm	19/06/2019	11.4	78.51	226.1	8.5	0
SUEZ Spring Farm	20/06/2019	8	73.57	189.9	9.2	0
SUEZ Spring Farm	21/06/2019	8.2	78.78	183.2	8.2	1.2
SUEZ Spring Farm	22/06/2019	7.9	69.16	201.4	12.1	0
SUEZ Spring Farm	23/06/2019	8.7	73.77	205.1	11.8	0
SUEZ Spring Farm	24/06/2019	10.4	81.42	203.1	11.7	7.6
SUEZ Spring Farm	25/06/2019	11.4	88.76	181.6	8.9	0.6
SUEZ Spring Farm	26/06/2019	12.5	85.63	171	7.4	0
SUEZ Spring Farm	27/06/2019	12.4	84.79	166.7	7.4	0.2
SUEZ Spring Farm	28/06/2019	11.9	86.39	143.4	8.5	0
SUEZ Spring Farm	29/06/2019	11.8	85.98	135.5	9	0.2
SUEZ Spring Farm	30/06/2019	13.6	72.97	123	12.4	0
SUEZ Spring Farm	1/07/2019	9.3	64.46	212.3	10.5	0
SUEZ Spring Farm	2/07/2019	9.2	72.27	188.9	8.3	0
SUEZ Spring Farm	3/07/2019	10.6	54.87	196.4	10.3	0
SUEZ Spring Farm	4/07/2019	11.9	82.1	202.6	6.8	0.4
SUEZ Spring Farm	5/07/2019	12.5	92.36	176.6	7	8.4
SUEZ Spring Farm	6/07/2019	11.7	95.52	152.2	8.1	2.8
SUEZ Spring Farm	7/07/2019	12.4	87.19	133.6	7.8	2
SUEZ Spring Farm	8/07/2019	12.4	87.42	168.2	6.5	0.6
SUEZ Spring Farm	9/07/2019	12.4	79.61	226	8.6	0
SUEZ Spring Farm	10/07/2019	9.6	73.59	238	9.8	0
SUEZ Spring Farm	11/07/2019	11.4	64.73	228.4	12.6	0
SUEZ Spring Farm	12/07/2019	13.3	53.33	249.7	16.3	0
SUEZ Spring Farm	13/07/2019	14.1	54.51	273.2	17.1	0
SUEZ Spring Farm	14/07/2019	9.1	56.99	241.9	22.8	1.4
SUEZ Spring Farm	15/07/2019	11.3	56.59	248.6	24.1	0
SUEZ Spring Farm	16/07/2019	11.2	60.51	229.7	15.3	0
SUEZ Spring Farm	17/07/2019	12.3	62.83	218.1	13.8	0
SUEZ Spring Farm	18/07/2019	12.9	57.2	245.4	21	1.8
SUEZ Spring Farm	19/07/2019	10.9	56.46	237.3	11.6	0
SUEZ Spring Farm	20/07/2019	10.1	70.6	198.4	9.8	0
SUEZ Spring Farm	21/07/2019	9.9	72.37	174.2	8.4	0
SUEZ Spring Farm	22/07/2019	13.9	51.71	202.9	10.1	0
SUEZ Spring Farm	23/07/2019	12.9	66.98	117.4	9.1	0
SUEZ Spring Farm	24/07/2019	15.6	45.02	228	10.2	0
SUEZ Spring Farm	25/07/2019	10.4	63.47	195	12.1	0
SUEZ Spring Farm	26/07/2019	10.1	68.9	150	9	0
SUEZ Spring Farm	27/07/2019	12.1	70.37	183.4	7	0
SUEZ Spring Farm	28/07/2019	11	79.48	165.9	7.9	0
SUEZ Spring Farm	29/07/2019	9.9	76.19	179.3	8.9	0
SUEZ Spring Farm	30/07/2019	13.7	67.98	225.7	9.7	0.2
SUEZ Spring Farm	31/07/2019	10.2	74.67	212.9	9.2	0
SUEZ Spring Farm	1/08/2019	10.2	73.44	168.2	9.6	0.4
SUEZ Spring Farm	2/08/2019	11.4	74.18	184	9	0
SUEZ Spring Farm	3/08/2019	10.6	76.81	151	9	0
SUEZ Spring Farm	4/08/2019	10.6	66.93	177.7	9.8	0
SUEZ Spring Farm	5/08/2019	11.8	75.55	157.1	8	0
SUEZ Spring Farm	6/08/2019	10.9	68.84	150	10.7	0
SUEZ Spring Farm	7/08/2019	10.4	46.2	161.8	8	0
SUEZ Spring Farm	8/08/2019	11.5	46.05	175.5	8.9	0
SUEZ Spring Farm	9/08/2019	13.5	42.64	262.9	27	0
SUEZ Spring Farm	10/08/2019	10.9	43.97	261.2	31.3	17.8
SUEZ Spring Farm	11/08/2019	9.7	50.76	247.2	25.5	0.4
SUEZ Spring Farm	12/08/2019	10.3	51.2	232.2	20.6	0
SUEZ Spring Farm	13/08/2019	11.1	53.86	207.5	11.6	0
SUEZ Spring Farm	14/08/2019	10.1	64.8	166.8	10	0
SUEZ Spring Farm	15/08/2019	9.6	64.59	153.8	9.1	0
SUEZ Spring Farm	16/08/2019	10.9	46.93	204.8	10.1	0
SUEZ Spring Farm	17/08/2019	15	34.95	185.5	10.9	0
SUEZ Spring Farm	18/08/2019	11.2	72.3	155.8	9.6	0
SUEZ Spring Farm	19/08/2019	14.7	60.78	150.9	15.5	0
SUEZ Spring Farm	20/08/2019	10.2	45.45	241.8	22.4	0.4
SUEZ Spring Farm	21/08/2019	13.9	44.78	248.6	23.5	0
SUEZ Spring Farm	22/08/2019	16	44.32	244.7	30.5	0.6
SUEZ Spring Farm	23/08/2019	9.4	57.17	182.2	14.7	0



Site Name	Date	Average Air Temperature (°C)	Average Relative Humidity (%)	Average Wind Direction (°)	Average Wind Speed (km/h)	Total Rain Gauge (mm)
SUEZ Spring Farm	24/08/2019	9.7	59.46	134	8.9	0
SUEZ Spring Farm	25/08/2019	15.1	36.29	226.2	11.3	0
SUEZ Spring Farm	26/08/2019	14.2	66.68	168.6	8.7	0
SUEZ Spring Farm	27/08/2019	11.7	84.84	184.6	7.5	5.6
SUEZ Spring Farm	28/08/2019	11.8	81.08	168.5	10.3	0
SUEZ Spring Farm	29/08/2019	14	49.56	223.8	12.2	0.2
SUEZ Spring Farm	30/08/2019	10.3	83.93	202.9	13.1	14.6
SUEZ Spring Farm	31/08/2019	11.6	73.71	188.5	14.6	0
SUEZ Spring Farm	1/09/2019	11.9	76.31	162.4	11.3	0
SUEZ Spring Farm	2/09/2019	14.7	62.92	179.6	10.2	0
SUEZ Spring Farm	3/09/2019	13	73.09	174.1	9.5	0.2
SUEZ Spring Farm	4/09/2019	14.3	57.64	153.3	9.6	0
SUEZ Spring Farm	5/09/2019	18.8	38.64	218	12.9	0
SUEZ Spring Farm	6/09/2019	15.7	72.49	127.8	7.3	0
SUEZ Spring Farm	7/09/2019	15.4	51.99	229.7	24.3	3.4
SUEZ Spring Farm	8/09/2019	13.1	41.99	247.4	35.9	4.6
SUEZ Spring Farm	9/09/2019	12.6	44.31	243	24.7	0
SUEZ Spring Farm	10/09/2019	11	48.72	219	22.8	0
SUEZ Spring Farm	11/09/2019	10.6	66.16	170.4	12.3	0
SUEZ Spring Farm	12/09/2019	12.3	67.32	137.6	8.8	0
SUEZ Spring Farm	13/09/2019	16.6	36.28	209.5	10.8	0
SUEZ Spring Farm	14/09/2019	15.7	58.38	142.4	9.4	0
SUEZ Spring Farm	15/09/2019	12.8	68.26	151.8	9.7	0
SUEZ Spring Farm	16/09/2019	20.2	39.33	145	6.2	0
SUEZ Spring Farm	17/09/2019	13.6	71.86	176.2	13.6	15.8
SUEZ Spring Farm	18/09/2019	11.2	87.56	190.7	14.5	17.8
SUEZ Spring Farm	19/09/2019	13.5	92.67	171.3	10.7	1.6
SUEZ Spring Farm	20/09/2019	16.3	87.68	57.6	9.2	6.6
SUEZ Spring Farm	21/09/2019	17.5	83.43	46.7	12.6	0
SUEZ Spring Farm	22/09/2019	19	72.91	124	10.7	0
SUEZ Spring Farm	23/09/2019	15.1	69.99	166.8	9.3	0
SUEZ Spring Farm	24/09/2019	12.8	49	207	16.5	0
SUEZ Spring Farm	25/09/2019	13.3	55.68	179.1	8.6	0
SUEZ Spring Farm	26/09/2019	14.1	73.65	144.6	8.5	0
SUEZ Spring Farm	27/09/2019	16.1	74.77	117.3	10.6	0
SUEZ Spring Farm	28/09/2019	18	42.21	225.9	11.3	0
SUEZ Spring Farm	29/09/2019	13.2	63.9	170.9	9.8	0
SUEZ Spring Farm	30/09/2019	15.2	67.61	175.3	8.4	0
SUEZ Spring Farm	1/10/2019	13.8	70.98	173.6	8.1	0
SUEZ Spring Farm	2/10/2019	14.4	71.36	108.3	10.1	0
SUEZ Spring Farm	3/10/2019	18.6	56.6	153.6	10	0
SUEZ Spring Farm	4/10/2019	22	40.58	173.6	10.3	0
SUEZ Spring Farm	5/10/2019	19.6	67.61	179	11.3	10.8
SUEZ Spring Farm	6/10/2019	15.4	85.78	122.4	7.5	0.6
SUEZ Spring Farm	7/10/2019	19.1	77.71	132.9	9.5	0
SUEZ Spring Farm	8/10/2019	18.2	78.69	118.1	8.6	0
SUEZ Spring Farm	9/10/2019	14.2	54.72	225.8	19.3	0

APPENDIX H ODOUR MANAGEMENT PLAN

Odour Management Plan

Spring Farm Resource Recovery Park

Document PLANS004

Issue date 03 May 2018

Version 1



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Objectives

The objective of the Odour Management Plan is to ensure that the SUEZ is operating Spring Farm Resource Recovery Park (SFRRP) in a manner to manage the potential impacts of odour within the site vicinity and to not impact on neighbouring properties.

The requirements for the Odour Management Plan is to include a description of all potential odour sources and identify how odour control measures will be adopted to limit odour release.

Activities to manage potential odours from the operations will include periodic monitoring during operations, odour monitoring, contingency plans and complaint procedures.

The requirement is to 'implement the plan', which means that all operations must use the odour control facilities provided in design and document the procedures to be followed in operations and maintenance to keep odour emissions within the levels necessary to meet the objective.

Potential Odour Sources

As part of a review process of Odour Management Plan SUEZ has identified potential odour sources that may occur from the operations at the facility and using the SUEZ internal risk management procedure. The potential odour sources have been ranked from most potential to least potential. This is listed below

- Waste Reival and Storage in ARRF
- Waste Reival and Storage in MRF
- Waste Reival and Storage in GO
- Waste Reival and Storage in Tank Farm
- Waste Reival and Storage in Public drop off
- Processing & Storage of Organic product
- Processing & Storage of Liquid treatment

Controls of Potential Odour Sources

As part of the risk management procedure controls have been identified and implemented to ensure that all potential odour sources are controlled and do not impact on neighbouring properties. The controls have been broken down into areas of potential odours sources which are listed below.

Waste Reival, Processing and Storage in ARRF

- Section L2.1 of Environmental Protection Licence No 12588 stipulates the types of wastes that are acceptable to be received at the facility. This is monitored by the weighbridge staff and site operators using the waste classification guidelines.
- If odorous waste has been identified, it must be directed to the appropriate area and stored within the building at all times and processed as soon as possible.
- The total volume of waste stored at the facility must not exceed the limits as stated in condition L2.2 of Environmental Protection Licence No 12588 which states the authorised amount of waste permitted on site at any one time cannot exceed 6500 tonnes.
- All equipment used in this area is cleaned on a regular basis
- Litter patrols are conducted on a regular basis
- All waste that is required to be disposed at a landfill is loaded out in a walking floor. The waste is then transported to landfill.
- Walking floor is fully sealed and is covered or tarped at the top.
- Automated closing doors on timers are utilised to control the release of odour
- Deodoriser line in reception hall

Waste Receival, processing and Storage in GO

- All organic product that is collected are to be stored within the awning at all times.
- Material decontamination is carried out as organic material is received
- All equipment used in this area is cleaned on a regular basis.
- Residual waste is transported to the ARRF as soon as possible for processing.
- Processed material is stored in tunnels for pasteurisation.

Waste Receival, processing and Storage in Tank Farm

- The Liquid Treatment area is inside self-contained bund.
- All liquids are stored in tanks and vapour/gas/odour from tanks is captured and directed into odour dewatering screws for treatment.
- All spills are captured within bund and transferred into a tank within the liquid treatment area.
- All equipment used in this area is cleaned on a regular basis.
- Once processed, liquid is tankered off site for disposal at a licenced facility.
- Odour fence around perimeter

Waste Receival, processing and Storage in Public drop off

- Waste is segregated into waste types
- All waste that is required to be disposed at a landfill is loaded out in a walking floor. The waste is then transported to landfill.
- Resource recoverable material is transferred to the MRF for processing or off site to a recovery centre
- Haz chem items are stored within IBCs, bunds, cage or drums. These are stored and clearly labelled while waiting collection

Waste Receival, processing and Storage in MRF

- All waste is received within the MRF building
- Waste is segregated into waste types for processing
- Residual waste is transported to the ARRF as soon as possible for processing
- Resource recoverable material is sorted, processed and baled in preparation for off take
- Processed material is stored under the awning at the rear of the MRF for collection
- Processed material is transported off site daily in enclosed or covered transport

Storage of chemicals used for processing

- Chemicals that are used for processing are stored within IBCs or chemical drums. These are stored in bunded chemical area and clearly labelled.
- Segregated as per Australian Standards
- All spills are captured following SOP007 Spill response.

Odour Monitoring

The following odour monitoring will occur to ensure that all controls are effective

- Weekly review of controls on potential odour sources
- Odour tours conducted weekly on and off site to determine if potential odour sources are leaving the site, refer to *Appendix 1 – Site Monitoring Locations*
- Daily odour assessment on bio filter and dewatering screws operations
- Tri annual bio filter system media change

Complaint Handling

A free call telephone line through SUEZ's Customer Service department operates 24 hours a day 7 days per week. PH: 13 13 35 (COC 153). The details of all complaints received and actions taken in response to the complaints are kept on the SUEZ database through the SIMS system. Complaints received via the hotline are investigated and responded to within the allocated time frame, refer to the *Environmental Complaints SOP*.

The information to be recorded as part of the investigation includes;

- Name of complainant;
- Contact details of complainant (e.g. telephone, email, postal address);
- Location, date and time at which alleged environmental impact occurred (street address);
- A general description of the nature of the environmental impact, including the following where applicable:
 - Duration and any pattern;
 - Character of odour;
- Whether there were any adverse health effects related to the environmental impact;
- What response has been requested or expected by complainant from SUEZ (e.g. a return phone call);
- The likely source(s) of the cause of the complaint; and
- What the weather conditions (e.g. wind speed, wind direction, temperature) were like at the time of the alleged environmental impact

Responsibilities

Site Manager & Compliance

The site manager has responsibility for:

- Implementation of this plan
- Conforming with plan
- Training of staff in the plan
- Communication of the plan
- Reporting of incidents
- Ensuring corrective actions are taken

Site Supervisor

The site supervisor has the responsibility for:

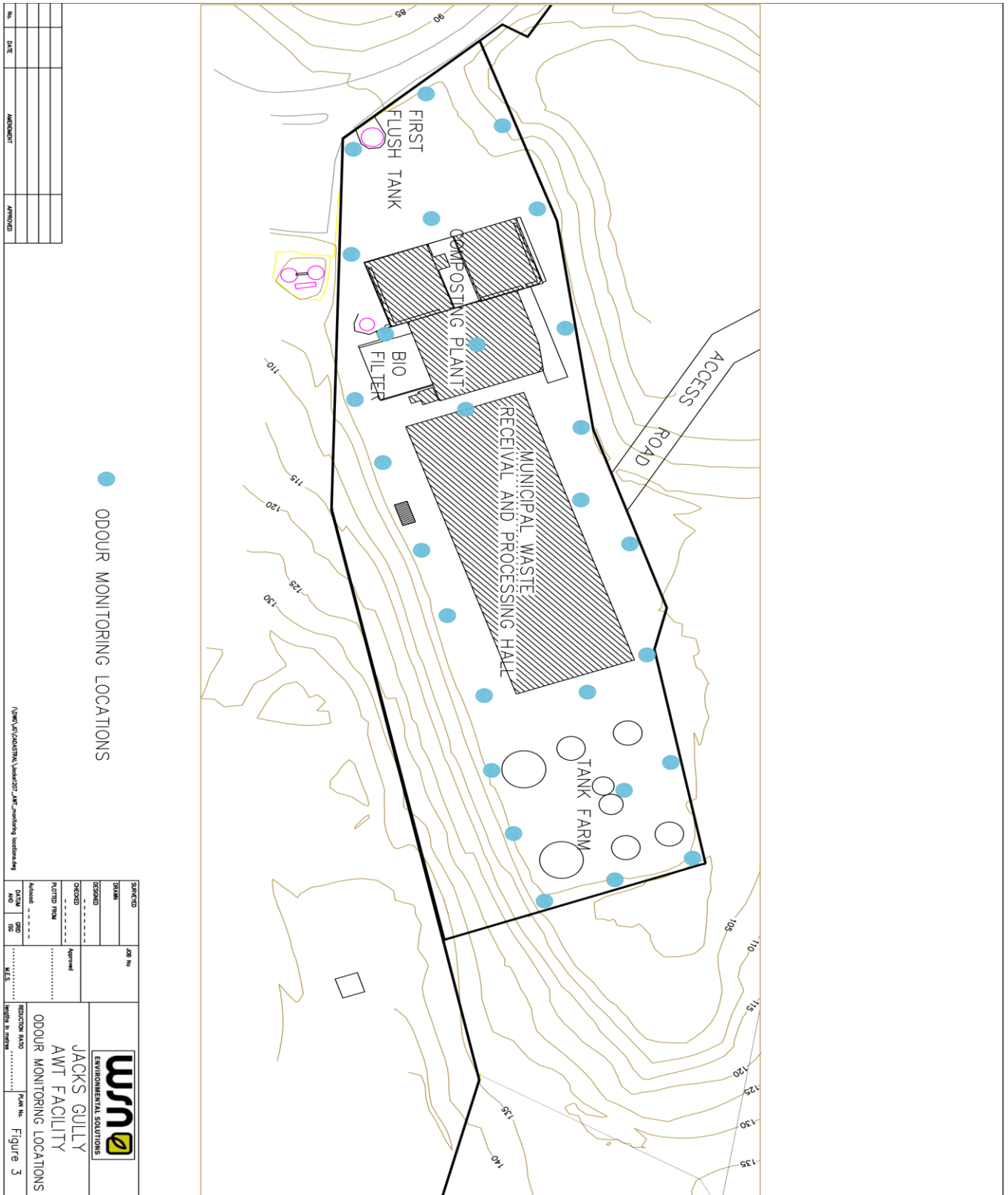
- Ensuring adherence to this plan
- Conforming with site plan
- Reporting of incidents
- Implementing corrective actions

Site staff

All site staff have the responsibility for:

- ☐ Ensuring adherence to this plan
- ☐ Conforming with site rules
- ☐ Reporting of maintenance defects
- ☐ Reporting of incidents

APPENDIX 1. - Site monitoring locations



Related Documents

DOCUMENT NAME	REFERENCE NUMBER
SFARRF & SFMRF Risk Register	REG011
Spill Response	SOP007
Site Maintenance	SOP041
Environment Protection Licence	EPL 12588, 20021, 5105
Environment Management Plan	PLAN004
Environmental Complaints	SOP066
Pollution Incident Response Management Plan	PLAN003.2.13.1

Review and Document Control

VERSION	CHANGE	REVIEWED	AUTHORISED	DATE ISSUED
1	Initial Issue	Kelly Gee M Stojanoski	Nat EQS Mgr	21/08/2017

APPENDIX I DUST MONITORING DATA

Site	Company	Location of DDG	Monitoring Date Start	Monitoring Date End	NSW EPA Annual Average Target (g/m2/month)	Total Insoluble Matter (g/m2/month)	Rolling Annual Average Total Insoluble Matter (g/m2/month)
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	1/09/2018	1/11/2018	4	0.3	0.30
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	1/09/2018	1/11/2018	4	1.1	1.10
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	2/11/2018	31/01/2019	4	1.1	1.10
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	2/11/2018	31/01/2019	4	1.9	1.10
Spring Farm ARRF	SUEZ Australia Pty Ltd	Barrow Road	2/11/2018	31/01/2019	4	0.1	0.10
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	1/02/2019	19/03/2019	4	1.4	1.20
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	1/02/2019	19/03/2019	4	2.2	1.47
Spring Farm ARRF	SUEZ Australia Pty Ltd	Barrow Road	1/02/2019	19/03/2019	4	4.5	2.30
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	19/03/2019	6/06/2019	4	0.6	1.05
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	19/03/2019	6/06/2019	4	0.9	1.33
Spring Farm ARRF	SUEZ Australia Pty Ltd	Barrow Road	19/03/2019	6/06/2019	4	1.8	2.13
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	7/06/2019	4/08/2019	4	0.8	1.00
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	7/06/2019	4/08/2019	4	0.5	1.16
Spring Farm ARRF	SUEZ Australia Pty Ltd	Barrow Road	7/06/2019	4/08/2019	4	2	2.10
Spring Farm ARRF	SUEZ Australia Pty Ltd	Moyengully Access Gate	5/08/2019	3/10/2019	4	1.2	1.03
Spring Farm ARRF	SUEZ Australia Pty Ltd	Phone Tower	5/08/2019	3/10/2019	4	1	1.13
Spring Farm ARRF	SUEZ Australia Pty Ltd	Barrow Road	5/08/2019	3/10/2019	4	2.5	2.18

CERTIFICATE OF ANALYSIS

Work Order : **EN1900764**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM
Telephone : **----**
Project : **SY/384/16**
Order number : **4400002226**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **EN/222**
No. of samples received : **3**
No. of samples analysed : **3**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 04-Feb-2019 17:00
Date Analysis Commenced : 06-Feb-2019
Issue Date : 08-Feb-2019 19:42



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dianne Blane	Laboratory Coordinator (2IC)	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².mth as sampling data was provided by the client.
- Sample exposure period is 90 days which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.
- No copper sulfate correction was applied to sample #3.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 02/11/2018-31/01/2019	ARRF/Tower 02/11/2018-31/01/2019	ARRF/Barrow 02/11/2018-31/01/2019	----	----
Client sampling date / time				31-Jan-2019 00:00	31-Jan-2019 00:00	31-Jan-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	EN1900764-001	EN1900764-002	EN1900764-003	-----	-----
				Result	Result	Result	----	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	0.9	1.3	0.1	----	----
Ash Content (mg)	----	1	mg	46	71	4	----	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.2	0.6	<0.1	----	----
Combustible Matter (mg)	----	1	mg	12	31	<1	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.5	<0.1	0.3	----	----
Total Soluble Matter (mg)	----	1	mg	28	<1	18	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	1.1	1.9	0.1	----	----
Total Insoluble Matter (mg)	----	1	mg	58	102	4	----	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	1.6	1.9	0.4	----	----
Total Solids (mg)	----	1	mg	86	102	22	----	----

CERTIFICATE OF ANALYSIS

Work Order : **EN1807361**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
 SPRING FARM
Telephone : ----
Project : **SY/384/16**
Order number : **4400002226**
C-O-C number : ----
Sampler : **KELLY GEE**
Site : ----
Quote number : **SY/384/16**
No. of samples received : **2**
No. of samples analysed : **2**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 02-Nov-2018 17:00
Date Analysis Commenced : 06-Nov-2018
Issue Date : 09-Nov-2018 18:09



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dianne Blane	Laboratory Coordinator (2IC)	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².mth as sampling data was provided by the client.
- Sample exposure period is 61 days which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 01/09/18 - 01/11/18	ARRF/Tower 01/09/18 - 01/11/18	----	----	----
Client sampling date / time				01-Nov-2018 00:00	01-Nov-2018 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EN1807361-001	EN1807361-002	-----	-----	-----
				Result	Result	----	----	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	0.2	0.7	----	----	----
Ash Content (mg)	----	1	mg	6	25	----	----	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.1	0.4	----	----	----
Combustible Matter (mg)	----	1	mg	3	14	----	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.3	<0.1	----	----	----
Total Soluble Matter (mg)	----	1	mg	10	1	----	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	0.3	1.1	----	----	----
Total Insoluble Matter (mg)	----	1	mg	9	39	----	----	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	0.6	1.1	----	----	----
Total Solids (mg)	----	1	mg	19	40	----	----	----

CERTIFICATE OF ANALYSIS

Work Order : **EN1901946**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM
Telephone : **----**
Project : **SY/384/16**
Order number : **4600002226**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **SY/384/16**
No. of samples received : **3**
No. of samples analysed : **3**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 20-Mar-2019 17:00
Date Analysis Commenced : 22-Mar-2019
Issue Date : 27-Mar-2019 17:53



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Dianne Blane	Laboratory Coordinator (2IC)	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².month as sampling data was provided by the client.
- Sample exposure period is 46 days which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.
- No copper sulfate correction was applied to sample #2.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 01/02/19 - 19/03/19	ARRF/Tower 01/02/19 - 19/03/19	ARRF/Barrow 01/02/19 - 19/03/19	----	----
Client sampling date / time				19-Mar-2019 00:00	19-Mar-2019 00:00	19-Mar-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	EN1901946-001	EN1901946-002	EN1901946-003	-----	-----
				Result	Result	Result	----	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	1.1	1.7	3.4	----	----
Ash Content (mg)	----	1	mg	31	45	91	----	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.3	0.5	1.1	----	----
Combustible Matter (mg)	----	1	mg	7	15	31	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.6	0.6	1.2	----	----
Total Soluble Matter (mg)	----	1	mg	17	17	32	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	1.4	2.2	4.5	----	----
Total Insoluble Matter (mg)	----	1	mg	38	60	122	----	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	2.0	2.8	5.7	----	----
Total Solids (mg)	----	1	mg	55	77	154	----	----

CERTIFICATE OF ANALYSIS

Work Order : **EN1904067**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
 SPRING FARM
Telephone : ----
Project : **SY/384/16**
Order number : **4600002226**
C-O-C number : ----
Sampler : **KELLY GEE**
Site : ----
Quote number : **SY/384/16**
No. of samples received : **3**
No. of samples analysed : **3**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 11-Jun-2019 17:20
Date Analysis Commenced : 14-Jun-2019
Issue Date : 19-Jun-2019 15:09



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Signatories

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<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Alison Graham	Supervisor - Inorganic	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².mth as sampling data was provided by the client.
- Sample exposure period is 79 days which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 19/03/19 - 06/06/19	ARRF/Tower 19/03/19 - 06/06/19	ARRF/Barrow 19/03/19 - 06/06/19	----	----
Client sampling date / time				06-Jun-2019 00:00	06-Jun-2019 00:00	06-Jun-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	EN1904067-001	EN1904067-002	EN1904067-003	-----	-----
				Result	Result	Result	----	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	0.4	0.6	1.3	----	----
Ash Content (mg)	----	1	mg	20	28	62	----	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.2	0.3	0.5	----	----
Combustible Matter (mg)	----	1	mg	6	16	22	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.1	0.2	0.4	----	----
Total Soluble Matter (mg)	----	1	mg	7	8	18	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	0.6	0.9	1.8	----	----
Total Insoluble Matter (mg)	----	1	mg	26	44	84	----	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	0.7	1.1	2.2	----	----
Total Solids (mg)	----	1	mg	33	52	102	----	----

CERTIFICATE OF ANALYSIS

Work Order : **EN1905439**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM
Telephone : **----**
Project : **SY/384/16**
Order number : **4400002226**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **SY/384/16**
No. of samples received : **3**
No. of samples analysed : **3**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 06-Aug-2019 17:00
Date Analysis Commenced : 07-Aug-2019
Issue Date : 14-Aug-2019 17:53



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

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Signatories

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Signatories	Position	Accreditation Category
Dianne Blane	Laboratory Coordinator (2IC)	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².mth as sampling data was provided by the client.
- Sample exposure period is 58 days which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.
- No copper sulfate correction was applied to sample #3.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 07/06/19 - 04/08/19	ARRF/Tower 07/06/19 - 04/08/19	ARRF/Barrow 07/06/19 - 04/08/19	----	----
Client sampling date / time				06-Aug-2019 00:00	06-Aug-2019 00:00	06-Aug-2019 00:00	----	----
Compound	CAS Number	LOR	Unit	EN1905439-001	EN1905439-002	EN1905439-003	-----	-----
				Result	Result	Result	----	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	0.4	0.4	1.4	----	----
Ash Content (mg)	----	1	mg	15	12	49	----	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.4	0.1	0.6	----	----
Combustible Matter (mg)	----	1	mg	11	4	19	----	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.4	0.6	0.7	----	----
Total Soluble Matter (mg)	----	1	mg	14	19	23	----	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	0.8	0.5	2.0	----	----
Total Insoluble Matter (mg)	----	1	mg	26	16	68	----	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	1.2	1.1	2.7	----	----
Total Solids (mg)	----	1	mg	40	35	91	----	----

CERTIFICATE OF ANALYSIS

Work Order : **EN1907043**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM 2570
Telephone : **----**
Project : **SY/384/16**
Order number : **4400002226**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **SY/384/16**
No. of samples received : **4**
No. of samples analysed : **4**

Page : 1 of 2
Laboratory : Environmental Division Newcastle
Contact :
Address : 5/585 Maitland Road Mayfield West NSW Australia 2304
Telephone : +61 2 4014 2500
Date Samples Received : 08-Oct-2019 17:00
Date Analysis Commenced : 10-Oct-2019
Issue Date : 16-Oct-2019 15:53



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

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- Analytical Results

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Signatories

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<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Dianne Blane	Laboratory Coordinator (2IC)	Newcastle - Inorganics, Mayfield West, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

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Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

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 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

- Analysis as per AS3580.10.1-2016. Samples passed through a 1mm sieve prior to analysis. NATA accreditation does not apply for results reported in g/m².mth as sampling data was provided by the client.
- Sample exposure period is 59 days for #1-#3 and 21 days for #4 which is outside the typical exposure period of 30 +/- 2 days as per AS3580.10.1.

Analytical Results

Sub-Matrix: **DEPOSITIONAL DUST**
 (Matrix: **AIR**)

Client sample ID

				ARRF/Moyen 05/08/19 - 03/10/19	ARRF/Tower 05/08/19 - 03/10/19	ARRF / Barrow 05/08/19 - 03/10/19	ARRF / Glass 02/09/19 - 23/09/19	----
Client sampling date / time				03-Oct-2019 00:00	03-Oct-2019 00:00	03-Oct-2019 00:00	23-Sep-2019 00:00	----
Compound	CAS Number	LOR	Unit	EN1907043-001	EN1907043-002	EN1907043-003	EN1907043-004	-----
				Result	Result	Result	Result	----
EA120: Ash Content								
Ash Content	----	0.1	g/m ² .month	0.9	0.7	1.7	18.8	----
Ash Content (mg)	----	1	mg	31	24	58	233	----
EA125: Combustible Matter								
Combustible Matter	----	0.1	g/m ² .month	0.3	0.3	0.8	3.5	----
Combustible Matter (mg)	----	1	mg	9	10	28	43	----
EA139: Total Soluble Matter								
Total Soluble Matter	----	0.1	g/m ² .month	0.4	0.6	0.4	1.2	----
Total Soluble Matter (mg)	----	1	mg	15	22	13	15	----
EA141: Total Insoluble Matter								
Total Insoluble Matter	----	0.1	g/m ² .month	1.2	1.0	2.5	22.3	----
Total Insoluble Matter (mg)	----	1	mg	40	34	86	276	----
EA142: Total Solids								
Total Solids	----	0.1	g/m ² .month	1.6	1.6	2.9	23.5	----
Total Solids (mg)	----	1	mg	55	56	99	291	----

APPENDIX J ODOUR PATROL DATA

SUEZ AUSTRALIA – SPRING FARM ADVANCED RESOURCE RECOVERY PARK


WEEKLY MONITORING ROUNDS RECORD SHEET

Assessor: Kelly Gee

Date: 10/10/18

Start Time: 8.45

Finish Time: 9.20

Please Mark Wind Direction with an arrow <div style="font-size: 2em; text-align: center;">150° SSE</div>	Wind Speed <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Light Breeze <input type="checkbox"/> Moderate Wind <input type="checkbox"/> Strong Winds	Rain <input type="checkbox"/> None <input checked="" type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <input type="checkbox"/> Extreme	Weather Conditions (tick all that apply) <input type="checkbox"/> Mostly Sunny <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Moderate <input type="checkbox"/> Fog <input type="checkbox"/> Cold <input type="checkbox"/> Partly Sunny <input type="checkbox"/> Partly Cloud <input checked="" type="checkbox"/> Overcast <input type="checkbox"/> Freezing <input type="checkbox"/> Warm	
---	---	--	--	---



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Description

Time

Comments

	Description	Time	Comments
1.	Waterworth & Welling Drive	8.46	no odour
2.	Mt Annan Drive Mt Annan	8.57	Wet damp smell
3.	Commelina & Caley	9.04	Wet damp smell
4.	Moyengully, Mt Annan	9.03	Wet damp smell. water course odour
5.	Blackgum	9.00	Bushland wet smell
6.	Aotus Crt	9.01	no odour
7.	Waterworth & Hacking	8.45	no odour
8.	William Howe Regional Park	8.59	Wet bushland damp smell
9.	Rogers Way Mt Annan	8.51	no odour
10.	Bilson Road Spring Farm	9.15	no odour

Additional Comments and Observations

Cold morning, wet & light rain. All areas visited had wet earthy smell, however not offensive. Several days of rain has resulted in saturated areas.

Kyu

SUEZ AUSTRALIA – SPRING FARM ADVANCED RESOURCE RECOVERY PARK

WEEKLY MONITORING ROUNDS RECORD SHEET

Assessor: Kelly Gee

Date: 16/10/18

Start Time: 8:15 am

Finish Time:

Please Mark Wind
Direction with an
arrow15°
South

- Wind Speed**
- ☐ Calm
- ☐ Light Breeze
- ☒ Moderate Wind
- ☐ Strong Winds

- Rain**
- ☐ None
- ☒ Light
- ☐ Moderate
- ☐ Heavy
- ☐ Extreme

- Weather Conditions (tick all that apply)**
- ☐ Mostly Sunny
- ☐ Mostly Cloudy
- ☒ Moderate
- ☐ Fog
- ☐ Cold
- ☐ Partly Sunny
- ☐ Partly Cloud
- ☒ Overcast
- ☐ Freezing
- ☐ Warm

**Legend:**

	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Description

Time

Comments

	Description	Time	Comments
1.	Waterworth & Welling Drive	8.15	nil
2.	Mt Annan Drive Mt Annan	8.29	nil
3.	Commelina & Caley	8.26	nil
4.	Moyengully, Mt Annan	8.26	nil
5.	Blackgum	8.24	nil
6.	Aotus Crt	8.23	nil
7.	Waterworth & Hacking	8.18	nil
8.	William Howe Regional Park	8.21	nil
9.	Rogers Way Mt Annan	8.41	nil
10.	Bilson Road Spring Farm	8.54	nil

LKD = nil

8.52

Nicholson muc 8.55

nil

Additional Comments and Observations

No odour this morning off site at locations visited.

Site entry had no odour. Visit to Camden organics had no odour apart from immediate area beside reception area, but only when trucks were tipping.

No odour presented on drive around SFARRF.

[Signature]

SUEZ AUSTRALIA – SPRING FARM ADVANCED RESOURCE RECOVERY PARK

WEEKLY MONITORING ROUNDS RECORD SHEET

Assessor: Kelly Gee

Date: 22/10/18Start Time: 1:49 pm

Finish Time:

Please Mark Wind Direction with an arrow <div style="font-size: 2em; text-align: center;">240</div> <div style="text-align: center;">NNE</div>	Wind Speed <input type="checkbox"/> Calm <input checked="" type="checkbox"/> Light Breeze <input type="checkbox"/> Moderate Wind <input type="checkbox"/> Strong Winds <div style="font-size: 1.5em; text-align: center;">16 km/h</div>	Rain <input checked="" type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <input type="checkbox"/> Extreme	Weather Conditions (tick all that apply) <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Mostly Sunny <input checked="" type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Moderate <input type="checkbox"/> Fog <input type="checkbox"/> Cold </div> <div> <input type="checkbox"/> Partly Sunny <input type="checkbox"/> Partly Cloud <input type="checkbox"/> Overcast <input type="checkbox"/> Freezing <input checked="" type="checkbox"/> Warm </div> </div>	
---	---	--	--	--



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Description

Time

Comments

	Description	Time	Comments
1.	Waterworth & Welling Drive	1.56	No odour
2.	Mt Annan Drive Mt Annan	2.05	No odour
3.	Commelina & Caley	2.19	Earthy damp drying smell.
4.	Moyengully, Mt Annan	2.21	As above. Not offensive odour
5.	Blackgum	2.17	Drying damp smell
6.	Aotus Crt	2.18	No odour @ No 29.
7.	Waterworth & Hacking	2.09	No odour @ EMMS detected
8.	William Howe Regional Park	2.10	Very dry = damp drying out smell.
9.	Rogers Way Mt Annan	2pm	No odour. Dry & windy some dust.
10.	Bilson Road Spring Farm	1.49	No odour

Richardson Rd 1.50 No odour

Additional Comments and Observations

It was noted that two walking floors were slightly odourous when exiting over the weighbridge this afternoon however odour remained within vicinity of vehicle. No odour was evident around the ARRF or GO facilities. Slight odour outside office of tank farm but appeared to be isolated to immediate area. Walk around site revealed no further odour @ tank farm. 2.45 drive around site internal fence line identified no odour @ moyengully or along Botanical gardens fence line down to rail line @ SAPA.

*gok

SUEZ AUSTRALIA – SPRING FARM ADVANCED RESOURCE RECOVERY PARK


WEEKLY MONITORING ROUNDS RECORD SHEET

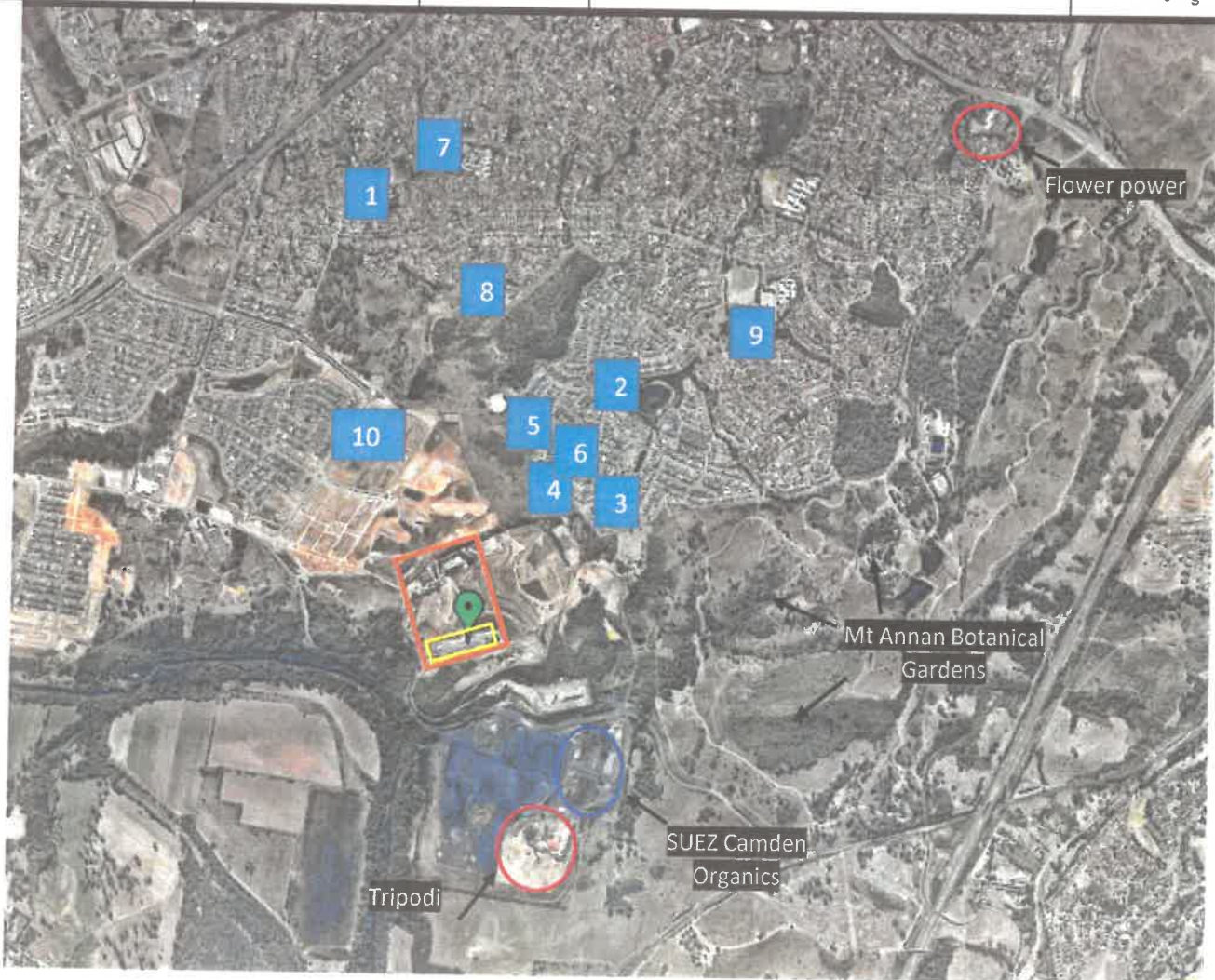
Assessor: Kelly Gee

Date: 30/10/18

Start Time: 8.06am

Finish Time: 8.22am

Please Mark Wind Direction with an arrow <div style="font-size: 2em; margin-top: 10px;">16°</div> <div style="font-size: 1.5em; margin-top: 10px;">WNE</div> <div style="font-size: 1.5em; margin-top: 10px;">5km</div>	Wind Speed <input checked="" type="checkbox"/> Calm <input type="checkbox"/> Light Breeze <input type="checkbox"/> Moderate Wind <input type="checkbox"/> Strong Winds	Rain <input checked="" type="checkbox"/> None <input type="checkbox"/> Light <input type="checkbox"/> Moderate <input type="checkbox"/> Heavy <input type="checkbox"/> Extreme	Weather Conditions (tick all that apply) <input checked="" type="checkbox"/> Mostly Sunny <input type="checkbox"/> Mostly Cloudy <input type="checkbox"/> Moderate <input type="checkbox"/> Fog <input type="checkbox"/> Cold <input type="checkbox"/> Partly Sunny <input type="checkbox"/> Partly Cloud <input type="checkbox"/> Overcast <input type="checkbox"/> Freezing <input checked="" type="checkbox"/> Warm	
--	---	--	---	---



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Description

Time

Comments

	Description	Time	Comments
1.	Waterworth & Welling Drive		
2.	Mt Annan Drive Mt Annan		
3.	Commelina & Caley		
4.	Moyengully, Mt Annan		
5.	Blackgum		
6.	Aotus Crt		
7.	Waterworth & Hacking		
8.	William Howe Regional Park		
9.	Rogers Way Mt Annan		
10.	Bilson Road Spring Farm		

Additional Comments and Observations

Camden By Pass, 613 Keirnan Drive, Richardson Rd, Barrow rd reflective of wind direction. No odour detected. Crew on LKD east bound, one lane closed pumping out drains with sweeper truck. Slight undescribable odour when passing work crew site on LKD however isolated to immediate area drain works were being conducted.

K. J. J.

SUEZ AUSTRALIA – SPRING FARM ADVANCED RESOURCE RECOVERY PARK

WEEKLY MONITORING ROUNDS RECORD SHEET

Assessor: Kelly Gee

Date: 5/11/18

Start Time: 2pm

Finish Time:

Please Mark Wind
Direction with an
arrow28°
NNE 2km/h

- Wind Speed**
- ☒ Calm
- ☐ Light Breeze
- ☐ Moderate Wind
- ☐ Strong Winds

- Rain**
- ☐ None
- ☐ Light
- ☐ Moderate
- ☐ Heavy
- ☐ Extreme

Weather Conditions (tick all that apply)

- ☐ Mostly Sunny
- ☒ Mostly Cloudy
- ☐ Moderate
- ☐ Fog
- ☐ Cold
- ☐ Partly Sunny
- ☐ Partly Cloud
- ☐ Overcast
- ☐ Freezing
- ☒ Warm

**Legend:**

	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Description

Time

Comments

	Description	Time	Comments
1.	Waterworth & Welling Drive	216	nil odour
2.	Mt Annan Drive Mt Annan	221	nil odour
3.	Commelina & Caley	223	nil odour
4.	Moyengully, Mt Annan	224	nil odour
5.	Blackgum	224	nil odour
6.	Aotus Crt	2	nil odour
7.	Waterworth & Hacking	207	nil odour
8.	William Howe Regional Park	206	nil odour
9.	Rogers Way Mt Annan	211	nil odour
10.	Bilson Road Spring Farm	203	nil odour

Additional Comments and Observations

Warm clear day which presented no evident odours during odour patrol today.

A lot of long grass in many areas following the wet weather in the past weeks; however no issues with offensive odours in any areas visited today.

Drive around tank farm, ARF, GO, public drop off a MRF appeared not to be releasing odours today.

KJA

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 15 Nov 18	Start time: 7.23am	Finish time: 8.40 am	
Completed by: Kelly Gee	Signature: <i>Kelly Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 10.5 km/h	Wind Direction: SE	Air temp: 16°	
Humidity:	Other Conditions: clear fine morning 0.6mm rain		
Reason for Monitoring			
Odour detected			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.44	0/5	nil odour present
2. Mt Annan Drive Mt Annan	7.48	0/5	nil odour
3. Commelina & Caley	7.52	4/5	8am revisit nil odour
4. Moyengully, Mt Annan	7.53	0/5	nil odour
5. Blackgum	7.55	0/5	nil odour
6. Aotus Crt	7.53	2/5	8.02 revisit nil. 8.05 nil
7. Waterworth & Hacking	—	—	—
8. William Howe Regional Park	7.55	1/5	slightest garbage smell
9. Rogers Way Mt Annan	—	—	—
10. Bilson Road Spring Farm	8.15	0/5	no odour present
Mary Howe	8.12	2/5	garbage odour
LKD + Barrow	8.17	1/5	slight garbage smell
Ephrim Howe	7.46	4/5	8.10 revisit nil odour
Coral bark	7.58	0/5	nil odour
Richardson Rd	8.14	0/5	nil odour
Additional Comments and Observations			
Bins out for collection on Welling drive, no collection trucks sighted. Organic odour @ Ephrim Howe.			
Investigation outcome and actions undertaken			
Door 2 @ ARRT impacted by truck on 14/11/18. Contractors currently on site repairing door. Fully functional by 9am. 150 tonnes on ground in ARRT. No odour in immediate area of ARRT or Organics. Normal activities on site.			

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 03 12 18	Start time: 7:03 am	Finish time: 7:50 am	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 11 km/h	Wind Direction: WNW	Air temp: 18°	
Humidity: 52%	Other Conditions: Clear sunny day		
Reason for Monitoring			
Weekly odour patrol.			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7:04	1	slight damp drying odour
2. Mt Annan Drive Mt Annan	7:08	0	no odour detected
3. Commelina & Caley	7:14	0	no odour detected
4. Moyengully, Mt Annan	7:13	0	no odour detected
5. Blackgum	7:18	1	musty drying odour
6. Aotus Crt	7:16	3	Garbage odour present
7. Waterworth & Hacking	—		Not visited today
8. William Howe Regional Park	7:05	0	no odour
9. Rogers Way Mt Annan	7:28	0	no odour
10. Bilson Road Spring Farm	7:02	0	no odour
11. Richardson Rd	7:00	0	no odour
12. Camden by pass	7:42	0	no odour detected
Additional Comments and Observations			
Fenceline internal site odour tour. no odour detected.			
Odour evident @ weighbridge 2/5 due to trucks leaving site @ 7am.			
Investigation outcome and actions undertaken			
Review of all doors @ ARRF. All operational & functioning correctly. All doors closed @ time of visit			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39


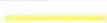


Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 13 12 18		Start time: 5.30 am	Finish time: 6.10 am
Completed by: Kelly Gee		Signature:	
Other Attendees:			
Weather Conditions			
Wind Speed: 2 km/h	Wind Direction: SW	Air temp: 19°	
Humidity: 95%	Other Conditions: Rain		
Reason for Monitoring			
Routine monitoring			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	5.53	0	nil
2. Mt Annan Drive Mt Annan	5.41	0	nil
3. Commelina & Caley	5.42	0	nil
4. Moyengully, Mt Annan	5.42	0	nil
5. Blackgum	5.44	0	nil
6. Aotus Crt	5.43	0	nil
7. Waterworth & Hacking	5.54	0	nil
8. William Howe Regional Park	5.47	0	nil
9. Rogers Way Mt Annan	5.30	0	nil
10. Bilson Road Spring Farm	6.01	0	nil
Richardson Rd	5.58	1	Slight garbage odour
LKD west	5.59	1	Trucks passing
LKD East	6.02	1	Following truck on route to site
Additional Comments and Observations			
Onsite fenceline revealed no odour @ all boundaries			
All ARRT doors operational			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 20 12 2018	Start time: 1040am	Finish time:	
Completed by: K Gee	Signature:		
Other Attendees:			
Weather Conditions			
Wind Speed: 9 km/h	Wind Direction: South	Air temp: 20°	
Humidity: 78%	Other Conditions: Clear fine day.		
Reason for Monitoring			
Identification if any odour is leaving site			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	10.47	0	Car exhaust smell
2. Mt Annan Drive Mt Annan	10.50	0	no odour evident
3. Commelina & Caley	10.55	0	Earthy bush smell
4. Moyengully, Mt Annan	10.55	0	nil detected
5. Blackgum	10.54	0	Chlorine smell in area
6. Aotus Crt	10.53	0	no odour
7. Waterworth & Hacking	—	—	Alternate route
8. William Howe Regional Park	10.59	0	Grass clipping odour - not offensive.
9. Rogers Way Mt Annan	—	—	not visited today
10. Bilson Road Spring Farm	10.42	0	no odour
LKW	10.40	0	no odour
Richardson Rd	10.45	0	no odour
Easton Ave	10.43	0	no odour
Additional Comments and Observations			
no offensive odours detected on route today.			
Dead cat @ Anne Pl mt Annan/Nivale.			
All site operations functioning correctly			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring



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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 15 01 19	Start time: 7.15	Finish time: 7.48	
Completed by: K Gee	Signature: <i>K Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 2 km/h	Wind Direction: NE	Air temp: 22°	
Humidity: 84%	Other Conditions: Clear, fine, sunny		
Reason for Monitoring			
Routine odour patrol + odour detected on Richardson Rd by compliance manager on route to work			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.29	2	Organic smell
2. Mt Annan Drive Mt Annan	7.32	0	no odour detected
3. Commelina & Caley	7.36	0	no odour detected
4. Moyengully, Mt Annan			
5. Blackgum	7.38	1	Organic smell
6. Aotus Crt	7.34	0	no odour detected
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm			
Richardson Rd	7.26	2	organic odour not offensive
Henrietta	7.42	3	organic odour not offensive
William Howe	7.43	2	organic smell
LKD + Barrow	7.47	1	organic smell
Additional Comments and Observations			
Odour detected, however not offensive smell. Upon investigation appeared to be trucks on route to facility in localized area.			
Investigation outcome and actions undertaken			
No odour on site. No unusual activities. All doors operating correctly. No unusual activities @ Camden Organics.			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 24 01 19	Start time: 6.40 am	Finish time: 7.30 am	
Completed by: Kelly Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 8 km/h	Wind Direction: South	Air temp: 19°	
Humidity: 78°	Other Conditions: Drizzling light rain on & off		
Reason for Monitoring			
Odour emitted from neighbouring business turning mushroom compost @ 7am			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	6.40	0	
2. Mt Annan Drive Mt Annan	6.42	0	
3. Commelina & Caley	6.46	0	
4. Moyengully, Mt Annan	6.46	0	
5. Blackgum	6.48	0	
6. Aotus Crt	6.47	0	
7. Waterworth & Hacking	—	—	
8. William Howe Regional Park	6.53	0	
9. Rogers Way Mt Annan	7.07	0	
10. Bilson Road Spring Farm	7.16	0	
Richardson Rd	7.13	0	
LKD + Barrow	7.19	0	
Additional Comments and Observations			
Strong odour from the south when entering SADA property. No abnormal activity @ SUEZ Camden. No pooling water on site.			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring



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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 31.1.19	Start time: 5pm	Finish time: 5.40	
Completed by: K Gledhill	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 16 km	Wind Direction: South	Air temp: 38.70	
Humidity: 28%	Other Conditions:		
Reason for Monitoring			
Identification if odour is emitted when no trucks entering or leaving facility			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	5.35	0	Nil odour evident in any late visited areas No unusual activity.
2. Mt Annan Drive Mt Annan	5.23	0	
3. Commelina & Caley	5.26	0	
4. Moyengully, Mt Annan	5.27	0	
5. Blackgum	5.29	0	
6. Aotus Crt	5.30	0	
7. Waterworth & Hacking	5.37	0	
8. William Howe Regional Park	5.31	0	
9. Rogers Way Mt Annan	5.17	0	
10. Bilson Road Spring Farm	5.02	0	
Barrow RD	5.00	0	
LKD	5.01	0	
Camden By Pass	5.03	0	
Additional Comments and Observations			
All facility doors closed & operations ceased for the day & trucks parked up. Operation @ Camden Organics ceased for the day also.			
no odour detected @ site boundary fence line.			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



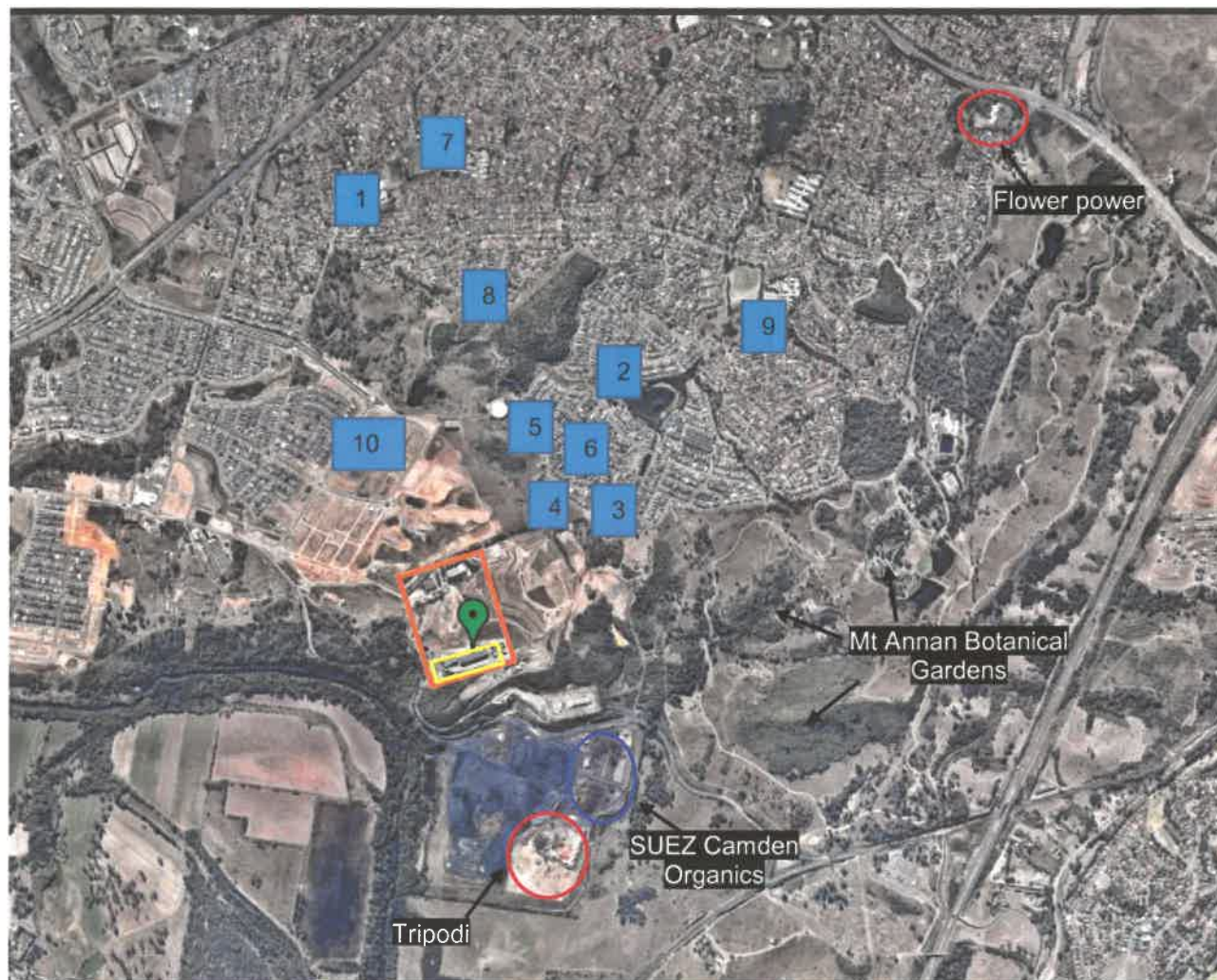
Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 4.2.19	Start time: 7am	Finish time: 7.45	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 3 km/h	Wind Direction: SE	Air temp: 19°	
Humidity: 90%	Other Conditions: Fine clear morning		
Reason for Monitoring			
Routine monitoring			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7am	0	nil detected
2. Mt Annan Drive Mt Annan	7.06	0	Bushland smell
3. Commelina & Caley	7.08	0	Grassy smell
4. Moyengully, Mt Annan	7.08	0	nil detected
5. Blackgum	7.11	0	nil detected
6. Aotus Crt	7.09	0	nil @ no 29
7. Waterworth & Hacking	-	-	not visited today
8. William Howe Regional Park	7.02	0	Dry earthy smell
9. Rogers Way Mt Annan	7.21	0	nil detected
10. Bilson Road Spring Farm	7.34	2	Slight organic smell - not old material
Camden By Pass		0	Earthy dirt smell
LKD West		0	Dry grass smell
LKD East		0	nil
Camden Organics		0/1	Fresh organic smell
Tripod		0/1	Wet sand smell - Coal dust.
Additional Comments and Observations			
no odour on SFAF fence line boundary			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 6 March 2019	Start time: 7.30	Finish time: 9.50	
Completed by: K Gee	Signature: <i>K. Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 6 km/h	Wind Direction: SE	Air temp: 22°	
Humidity: 80.46%	Other Conditions: Clear day. Rain forecast @ midday		
Reason for Monitoring			
Management of off site odour sources			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.37	0	no odour
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley	7.31	0	no odour
4. Moyengully, Mt Annan	7.30	0	no odour
5. Blackgum	7.33	0	no odour
6. Aotus Crt	7.32	0	no odour
7. Waterworth & Hacking	—		
8. William Howe Regional Park	7.35	0	no odour
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	7.49	0	nil odour
Barrow	7.47	1	Slight fresh organic smell
Austen & Hurst	7.50	0	no odour
Austen & Moira	7.52	0	no odour
Springs & Richardson	7.53	0	no odour
Mooney	9.12 & 9.17	no odour	N° 34 spreading underlay
Argent	9.08	1	organic fresh smell
Additional Comments and Observations			
Geddes st	9.16	0	no odour
Garton Road	9.09	1	slight organic odour
Call from N°7 Mooney & visit to residence. Discussion w Chris on odour type & severity. Left @ 9.43am			
Investigation outcome and actions undertaken			
Resident complained of strong odour in house. Upon entry, only odour of household pet evident. No organic or garbage smell identified inside home. Resident convinced inside house stunk like garbage.			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 11.2.19	Start time: 11.30am	Finish time: 12.05 pm	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 12 km/h	Wind Direction: NE	Air temp: 23%	
Humidity: 62%	Other Conditions: Clear weather		
Reason for Monitoring			
Compliance monitoring round			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	11.39	0	nil
2. Mt Annan Drive Mt Annan	11.41	0	nil
3. Commelina & Caley	11.46	0	nil
4. Moyengully, Mt Annan	11.45	1	Organic odour - not offensive
5. Blackgum	11.44	0	nil
6. Aotus Crt	11.43	0	nil
7. Waterworth & Hacking	-	-	not visited
8. William Howe Regional Park	11.37	0	nil
9. Rogers Way Mt Annan	-	-	not visited today.
10. Bilson Road Spring Farm	11.33	0	nil
LICO	11.30	0	nil
Barrow rd	11.52	0	nil
Camden Organics	12.01	2	fresh greenwaste @ tipping stockpile however no odour evident when entering site through SADA
Additional Comments and Observations			
Odour on site identified & contained to immediate area outside ARRT & G.O. when trucks tipping off. All doors operational.			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 15.2.19	Start time: 7.10am	Finish time: 8.55 am	
Completed by: Kelly Gee	Signature: <i>[Signature]</i>		
Other Attendees: -			
Weather Conditions			
Wind Speed: 5 km/h	Wind Direction: W	Air temp: 18°	
Humidity: 68%	Other Conditions: Fine Clear morning		
Reason for Monitoring			
moving odorous material from back wall of ARRT			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.10	2	
2. Mt Annan Drive Mt Annan	7.18	2	
3. Commelina & Caley	7.24	0	
4. Moyengully, Mt Annan	7.23	0	
5. Blackgum	7.22	0	
6. Aotus Crt	7.21	0	7.22, 7.25,
7. Waterworth & Hacking	7.11	0	
8. William Howe Regional Park	7.13	1	
9. Rogers Way Mt Annan	7.40	0	
10. Bilson Road Spring Farm	7.58	0	
Richardson Rd	7.55	0	
LK D - Barrow	8.02	0	
CSM - Tripodi	8.17	0	
Onsite fence line @ MARG	8.50	0	
ARRT Hardstand	9.20	5	
Additional Comments and Observations			
Trucks being presented @ Weighbridge 1/5 odour. All closed trailers. Contact from operator @ ARRT @ 8.23 communicating load composition - location			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 19.2.19	Start time: 5.50am	Finish time: 6.29am	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 8 km/h	Wind Direction: South	Air temp: 18°	
Humidity: 76%	Other Conditions: Fine clear morning		
Reason for Monitoring			
Routine patrol			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	5.50	0	no odour evident
2. Mt Annan Drive Mt Annan	6.03	0	no odour evident
3. Commelina & Caley	6.09	0	no odour evident
4. Moyengully, Mt Annan	6.07	0	no odour evident
5. Blackgum	6.06	0	Earthy smell - pleasant
6. Aotus Crt	6.07	0	No odour @ 29 Aotus
7. Waterworth & Hacking	5.50	0	no odour
8. William Howe Regional Park	6.12	1	organic damp smell
9. Rogers Way Mt Annan	5.56	0	no odour
10. Bilson Road Spring Farm	6.17	0	no odour
Richardson Rd	6.14	0	Dead fox on roadside
LKD	6.16	1	Passing council garbage truck
Austen Blvd	6.18	0	no odour
Additional Comments and Observations			
no odour detected off site this morning. Onsite @ ARRF - organics, only odour detected was in immediate area when trucks were tipping off.			
Investigation outcome and actions undertaken			
localised to immediate site facility entrance only ARRF/40.			

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 26 02 19	Start time: 10.13am	Finish time: 10.52 am	
Completed by: K Gee	Signature: <i>K Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 14 km/h	Wind Direction: N	Air temp: 26°	
Humidity: 48%	Other Conditions: Fine clear warm day		
Reason for Monitoring			
Routine monitoring following last weeks odour complaints to EPA			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	10.21	0	nil identified
2. Mt Annan Drive Mt Annan	10.42	0	nil identified
3. Commelina & Caley	10.44	0	nil identified
4. Moyengully, Mt Annan	10.45	0	nil identified
5. Blackgum	10.46	0	Dry dusty smell
6. Aotus Crt	10.45	0	nil @ N° 29 x 2 passes
7. Waterworth & Hacking	10.21	0	nil identified
8. William Howe Regional Park	10.20	0	nil identified
9. Rogers Way Mt Annan	10.31	0	nil identified
10. Bilson Road Spring Farm	10.15	0	Dry dusty earthy smell
LKD	10.17	0	Dirt/earthy smell
Richardson Rd	10.17	0	Diesel smell on passing
Citrus PI n/vale	10.25	0	nil in entire street
SFARRT	10.52	1	In immediate area @ ARRT
SFTank	10.53	0	no odour in immediate area.
Additional Comments and Observations			
wind direction in line with Citrus PI Narellan Vale, however no odour present in street @ time of visit. Dust & earthy smell on LKD & Bilson adjacent to civil works @ housing estate on AVS land.			
Investigation outcome and actions undertaken			
Processing of incoming tonnes at SFHD & loading out of material received @ the ARRT			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



Document #: FORM026.4.39

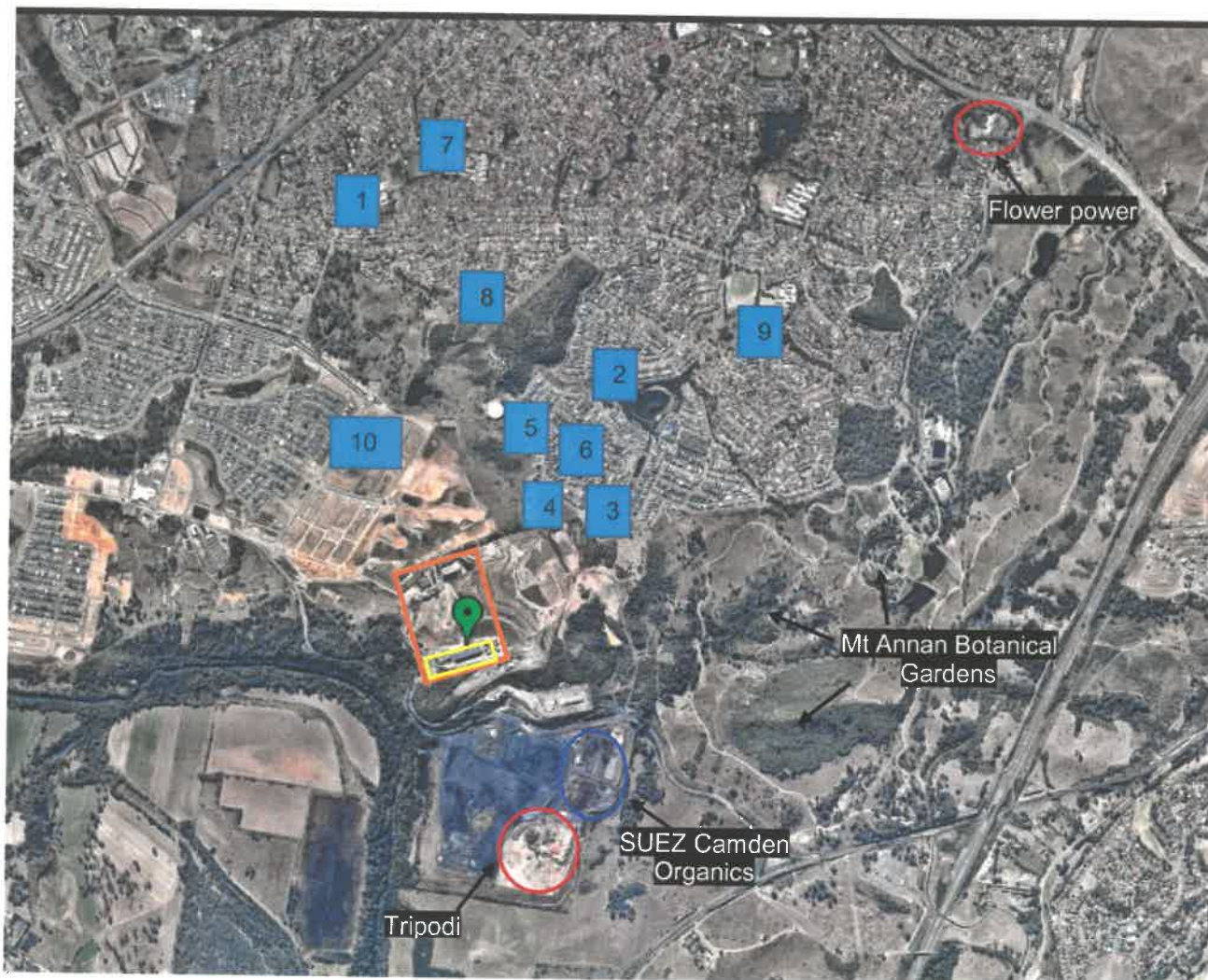
Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 27 02 19	Start time: 6.10am	Finish time: 6.34 am	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 12 km/h	Wind Direction: South	Air temp: 16°	
Humidity: 92%	Other Conditions: Clear crisp morning		
Reason for Monitoring			
Prior week of complaints from SF residents			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	6.13	0	No odour - Still - calm
Austen	6.17	0	No odour - Concrete truck @ house
Summer	6.15	0	No odour
Easton	6.19	0	Metal recycling truck parked up
Richardson	6.10	0	No odour
Nicholson	6.20	0	No odour
Lico	6.21	0	No odour
Additional Comments and Observations			
No odour present @ any locations visited. No odour @ exit gate of SFRRP. No activity @ Camden organics. No odour @ Camden organics or Tripodi. Easton ave bus lane works setting up for start of works.			
Investigation outcome and actions undertaken			

Spring Farm ARRT - Weekly Odour Monitoring



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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 4.3.19	Start time: 6.55	Finish time: 7.05	
Completed by: K Gee	Signature:		
Other Attendees:			
Weather Conditions			
Wind Speed: 6 km/h	Wind Direction: South	Air temp: 16.7°	
Humidity: 95.87%	Other Conditions:		
Reason for Monitoring			
maintaining review of odour sources & off site issues			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	6.59	2	Green waste smell
LKD West	6.57	2	Garbage odour
LKD East	6.58	2	Green waste odour
Barlow Rd	6.02	2	Green waste odour
Camden By Pass	6.55	0	No odour detected
Auster Blvd	6.01	2	Green waste smell
	* 6.54		Photo of ARRT reception floor.
Additional Comments and Observations			
ARRT = 1 load of dry waste. Half load of wet waste on floor only. Not enough to load out truck. All doors closed. No abnormal activities. No green waste odour in organics area. Trimming @ 7.15 am			
Investigation outcome and actions undertaken			
Review of glass stockpile area @ drop off. No odour present. All material covered in tarpaulins			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 6 March 2019	Start time: 7.30	Finish time: 9.50	
Completed by: K Gee	Signature: <i>K. Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 6 km/h	Wind Direction: SE	Air temp: 22°	
Humidity: 80.46%	Other Conditions: Clear day. Rain forecast @ midday		
Reason for Monitoring			
Management of off site odour sources			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.37	0	no odour
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley	7.31	0	no odour
4. Moyengully, Mt Annan	7.30	0	no odour
5. Blackgum	7.33	0	no odour
6. Aotus Crt	7.32	0	no odour
7. Waterworth & Hacking	—		
8. William Howe Regional Park	7.35	0	no odour
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	7.49	0	nil odour
Barrow	7.47	1	Slight fresh organic smell
Austen & Hurst	7.50	0	no odour
Austen & Moira	7.52	0	no odour
Springs & Richardson	7.53	0	no odour
Mooney	9.12 & 9.17	no odour	N° 34 spreading underlay
Argent	9.08	1	organic fresh smell
Additional Comments and Observations			
Geddes st	9.16	0	no odour
Garton Road	9.09	1	slight organic odour
Call from N°7 Mooney & visit to residence. Discussion w Chris on odour type & severity. Left @ 9.43am			
Investigation outcome and actions undertaken			
Resident complained of strong odour in house. Upon entry, only odour of household pet evident. No organic or garbage smell identified inside home. Resident convinced inside house stunk like garbage.			

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



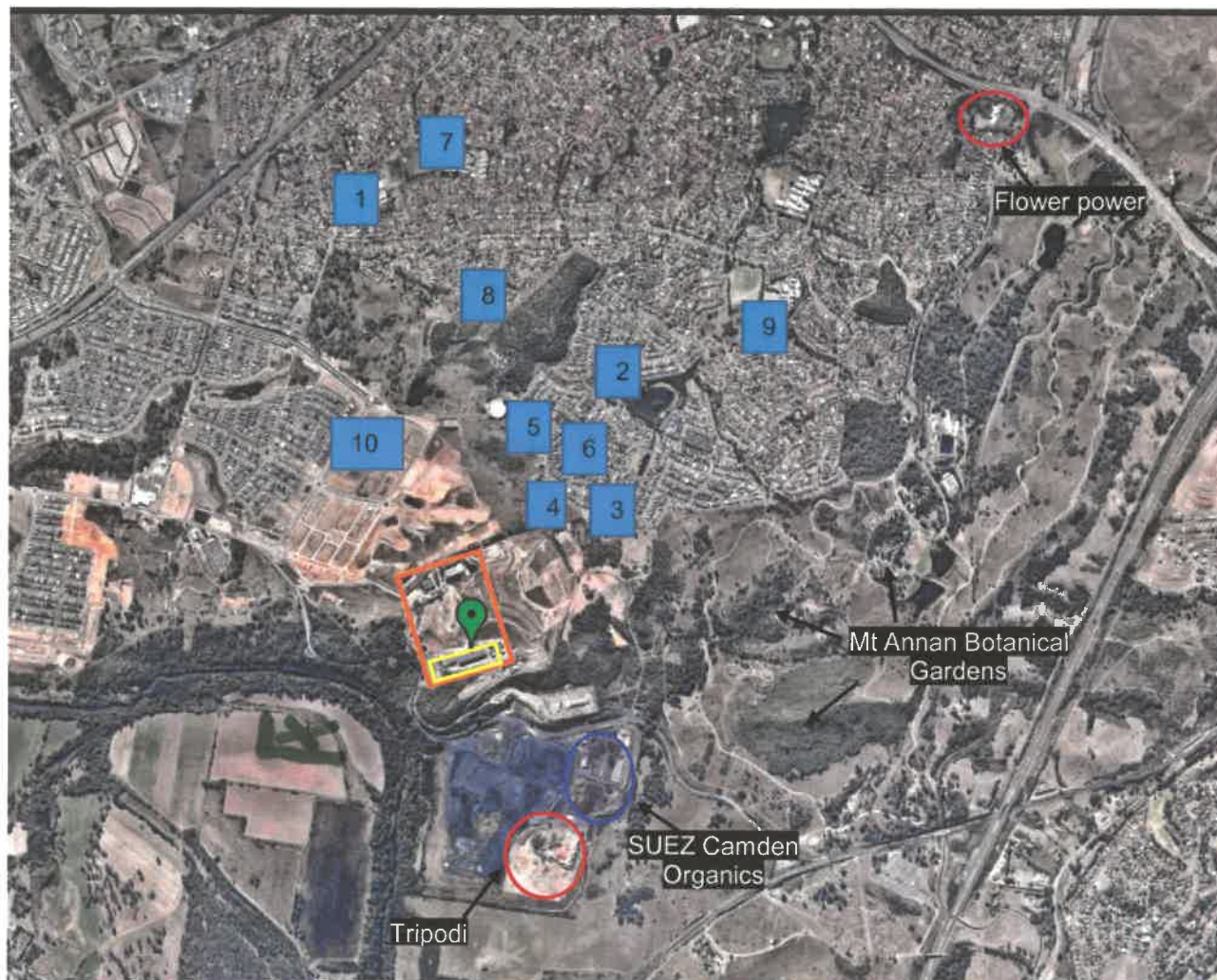
Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 20 03 19	Start time: 11:35am	Finish time: 12:30pm	
Completed by: Kelly Gee	Signature:		
Other Attendees: Teri Te Whiu			
Weather Conditions			
Wind Speed: 7.3 km/h	Wind Direction: SE	Air temp: 25°	
Humidity: 75.78 %	Other Conditions: Slightly overcast & cloudy		
Reason for Monitoring			
Random patrol to identify any potential odours			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park	11:35	0	no odour detected
9. Rogers Way Mt Annan	—	—	—
10. Bilson Road Spring Farm	11:37	0	Hot tar smell - new road being laid.
Barrow Road	11:35 +	0	new road being laid in P700
LKD east	11:36	0	no odour detected
LKD west	11:52	5	Decaying carcass rotting odour
Austen Blvd	11:55	0	no odour detected
Richardson - Springs	11:39	0	no odour detected
Additional Comments and Observations			
At fork in road on return to Camden organics, strong fertilizer (blood + bone) smell. It is noted that on the turf farm a tractor was visually identified spreading - noted in green on map			
Investigation outcome and actions undertaken			
Call to SPART operator to identify quantity of material in ARRT @ 12:24. All fresh material being loaded out. no old material. Door 2 open as had been impacted by truck earlier in the day. Awaiting contractor to arrive on site to repair			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
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Spring Farm ARRT - Weekly Odour Monitoring



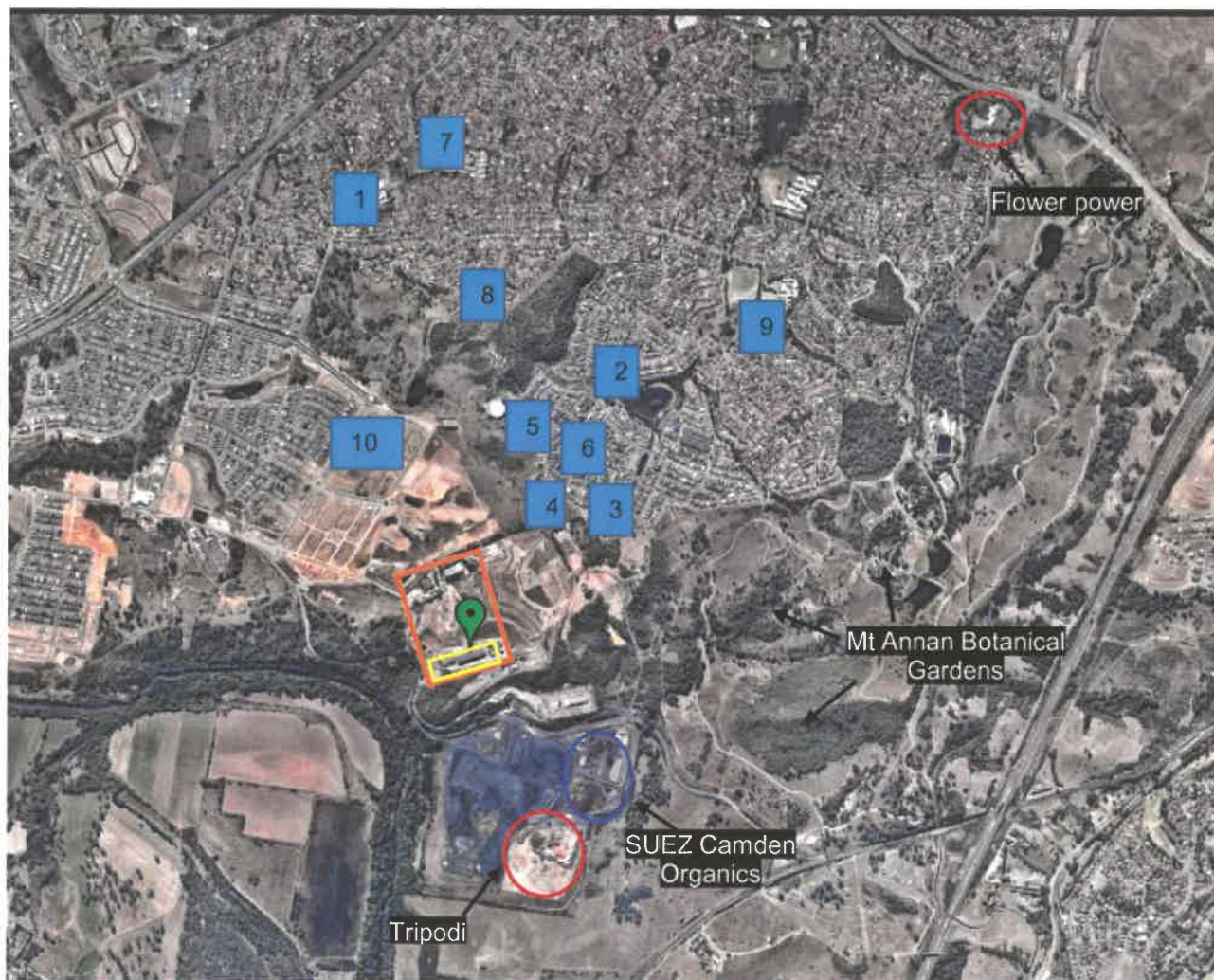
Document #: FORM026.4.39





Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 21 03 19	Start time: 6:35am	Finish time: 6:55am 7:03am	
Completed by: K Gee	Signature:		
Other Attendees:			
Weather Conditions			
Wind Speed: 3 km/h	Wind Direction: SW S	Air temp: 16.9°	
Humidity: 96-6%	Other Conditions: light drizzle, scattered cloud		
Reason for Monitoring			
Weekly monitoring round			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	6:42	0	nil
2. Mt Annan Drive Mt Annan	6:35	0	Damp bushy smell
3. Commelina & Caley	6:37	0	Damp grass smell
4. Moyengully, Mt Annan	6:38	0	nil
5. Blackgum	6:40	0	Damp bushy smell
6. Aotus Crt	6:39	0	nil
7. Waterworth & Hacking	6:44	0	nil
8. William Howe Regional Park	6:40	0	Light rain, damp musty smell
9. Rogers Way Mt Annan	6:51	0	nil
10. Bilson Road Spring Farm	6:55	0	nil
LKD West	6:58	0	nil
LKD East	6:59	0	nil
Barrow Rd	7:00	1	Passing truck slight odour from Camden Council incoming
Additional Comments and Observations			
Onsite greenwaste area emitting no odour. Only odour detected was on BARROW RD passing Council rubbish truck. Most areas presented wet damp earthy smells that were not offensive.			
Investigation outcome and actions undertaken			
Door @ ARRT being repaired however no odour off site.			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 27 03 18		Start time: 6.05am	Finish time: 6.42am
Completed by: K Gee		Signature:	
Other Attendees:			
Weather Conditions			
Wind Speed: 11 km/h	Wind Direction: SSE	Air temp: 15°	
Humidity: 89%	Other Conditions: Clear dark cool morning		
Reason for Monitoring			
Odour monitoring diligence.			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	6.09am	0	nil. Exhaust smell
2. Mt Annan Drive Mt Annan	6.11am	0	nil
3. Commelina & Caley	6.14am	0	nil
4. Moyengully, Mt Annan	6.15am	0	nil
5. Blackgum	6.19am	0	nil
6. Aotus Crt	6.17am	0	nil
7. Waterworth & Hacking	6.24am	0	nil
8. William Howe Regional Park	6.22am	0	nil. Damp earthy smell
9. Rogers Way Mt Annan	6.05am	0	nil. Very still & silent
10. Bilson Road Spring Farm	6.29am	0	nil
LKD West	6.28am	2	Burning mechanical smell, not SUEZ
LKD East	6.28am	0	nil. No trucks passing
Austen Blvd	6.31am	0	nil. Wet tar smell
Mooney St	6.33am	0	nil @ number 7.
Nicholson - Easton	6.35am	0	nil
Additional Comments and Observations			
No facility related odours detected this morning off site.			
Activities as normal & no trucks leaving facility.			
Slight organic odour @ compliance car park, however minimal			
Investigation outcome and actions undertaken			
nil required			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
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Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 03 04 19	Start time: 7.15 am	Finish time: 8.15 am	
Completed by: K Gee	Signature: <i>K Gee</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 6 km/h	Wind Direction: South	Air temp: 12° nil rain	
Humidity: 96°	Other Conditions: Extreme fog sitting very low		
Reason for Monitoring			
Diligence with odour management			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.29 am	0	nil present
2. Mt Annan Drive Mt Annan	7.21 am	0	nil present
3. Commelina & Caley	7.23 am	0	Damp wet grass smell
4. Moyengully, Mt Annan	7.24 am	0	nil detected
5. Blackgum	7.26 am	0	Damp bush smell
6. Aotus Crt	7.25 am - 7.26 am	0	nil @ either time
7. Waterworth & Hacking	—	—	not visited today
8. William Howe Regional Park	7.31	0	nil present
9. Rogers Way Mt Annan	7.15 am	0	nil present
10. Bilson Road Spring Farm	7.36 am	0	nil. strong earthy/clay smell
Richardson Rd	7.33 am	0	nil detected
LKD west	7.35 am	0	nil. no trucks on route
LKD east	7.42 am	0	nil.
Austen Blvd	7.37 am	0	nil present
Mooney St	7.39 am	0	nil present. A few bins out
Barrow rd	7.44	0 north end. 4/5 @ southern end.	
Additional Comments and Observations			
Barrow rd @ 7.44 @ southern end near TRN fuel depot, strong organic smell as result of trammeling pasturised tunnel material. 8 am - Camden organics site drive around. nil odour present			
Investigation outcome and actions undertaken			
Trammeling underway @ organics. Odour present in immediate area only. Very thick & low laying fog still present @ 8.15 am. no odour able to be detected approx 5 meters from fence line.			

Spring Farm ARRT - Weekly Odour Monitoring



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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 10 April 2019	Start time: 6.30pm	Finish time: 7.10pm
Completed by: K Gee	Signature:	

Other Attendees:

Weather Conditions

Wind Speed: 7.5 km/h	Wind Direction: SE	Air temp: 15°
Humidity: 66.42%	Other Conditions: clear	Rain: nil

Reason for Monitoring

Evening monitoring to evaluate off site odour after operations for the day had ceased at 4pm.

Odour Monitoring Results

Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	6.32	1.5	Organic odour present
11. Richardson Rd	6.38	3	Organic odour present
12. LKD West	6.31	1	Organic odour present
13. LKD East	6.41	1	light odour present
14. Austen Blvd	6.33	1	Organic odour present
15. Mooney St No 7	6.35	2	Heavier organic smell identified
Camden by pass	6.30	1	light organic odour

Additional Comments and Observations

Organic smell identified on approach to Richardson Rd. Further investigation in a ground residential area revealed heavier organic smell, however more fresh organic smell rather than unpleasant.





Investigation outcome and actions undertaken

Contact with maintenance crew on site to confirm all ARRT doors were closed, which they were

Spring Farm ARRT - Weekly Odour Monitoring

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	SUEZ Site Boundary
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Spring Farm ARRT - Weekly Odour Monitoring



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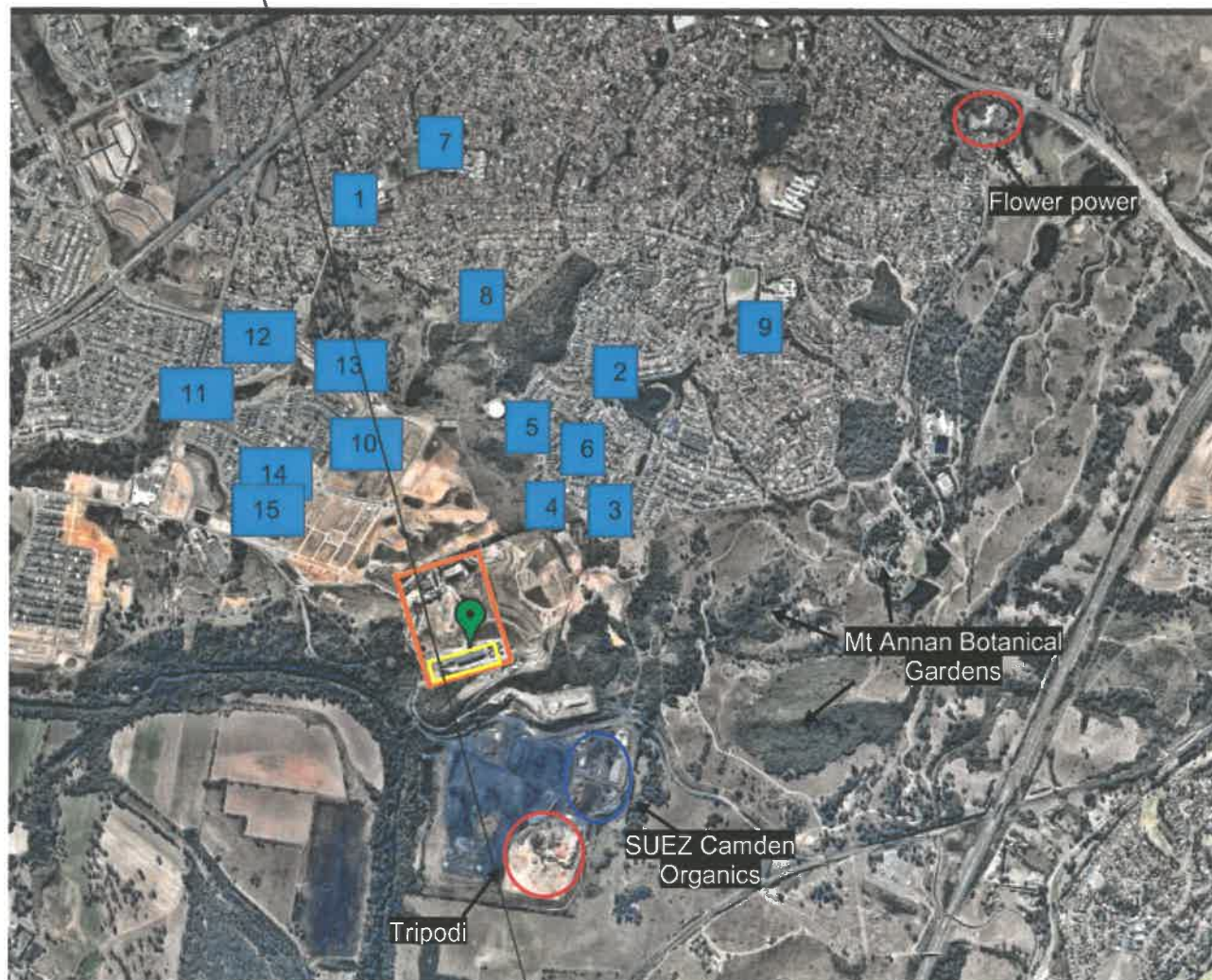
Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 13 April 2019		Start time: 8.30am	Finish time: 9am
Completed by: K Gee		Signature:	
Other Attendees:			
Weather Conditions			
Wind Speed: 8 km/h	Wind Direction: South	Air temp: 12°	
Humidity: 95.66 %	Other Conditions: clear morning	Rain: nil	
Reason for Monitoring			
Weekend monitoring to maintain compliance & control of odour			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm	8.32		no odour identified
11. Richardson Rd	8.41		no odour identified
12. LKD West	8.30am	0	no odour identified
13. LKD East	8.38	3	strong organic odour
14. Austen Blvd	8.34	2	Organic odour present
15. Mooney St	8.35	3	strong organic odour
Additional Comments and Observations			
odour identified @ facility side of SF residential area			
strong organic smell of fresh organic, not offensive.			
Investigation outcome and actions undertaken			
ARRT operational with weekend hours doors opening & closing. no organic loads received.			

Spring Farm ARRT - Weekly Odour Monitoring



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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 15 April 2019	Start time: 6.30 pm	Finish time: 7 pm	
Completed by: K Gie	Signature:		
Other Attendees:			
Weather Conditions			
Wind Speed: 6.6 km/h	Wind Direction: SE	Air temp: 16 °	
Humidity: 80.06 %	Other Conditions: Clear night	Rain: No rain	
Reason for Monitoring			
Contact with resident to enquire regarding if odour was present in area			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive			
2. Mt Annan Drive Mt Annan			
3. Commelina & Caley			
4. Moyengully, Mt Annan			
5. Blackgum			
6. Aotus Crt			
7. Waterworth & Hacking			
8. William Howe Regional Park			
9. Rogers Way Mt Annan			
10. Bilson Road Spring Farm			
11. Richardson Rd	6.38	0	no odour identified
12. LKD West	6.36	0	no odour identified
13. LKD East	6.35	1	slight organic odour
14. Austen Blvd	6.32	0.5	faint organic odour
15. Mooney St	6.30 pm	1	slight organic odour
Additional Comments and Observations			
Communication with resident identified air as "heavy with clear skies", a "bit smelly".			
Investigation outcome and actions undertaken			
All doors @ MARR closed. Approx 250 T of greenwaste in bunker. No activity @ Camden Organics or SPARRF. Odour present in immediate area & in some parallel locations.			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
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Spring Farm ARRT - Weekly Odour Monitoring



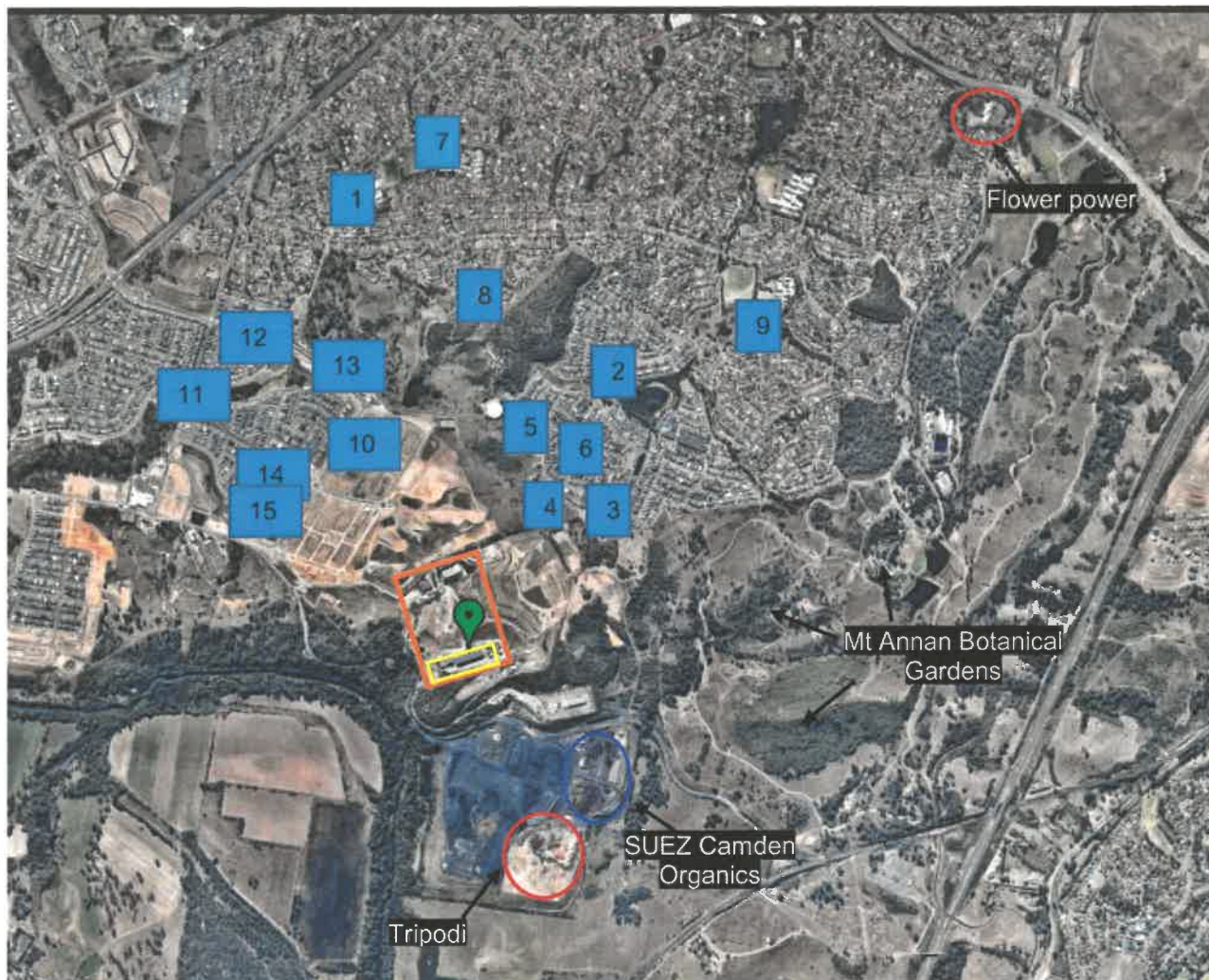
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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 17 04 18	Start time: 8.30am	Finish time: 9.15am	
Completed by: K Goe	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 3km/h	Wind Direction: SW	Air temp: 17°	
Humidity: 87%	Other Conditions: Clear + fine	Rain: nil	
Reason for Monitoring			
Routine monitoring to identify & manage onsite odour reflective of site operations			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	8.51	0	nil identified
2. Mt Annan Drive Mt Annan	8.41	0	nil identified
3. Commeline & Caley 8.48	8.44	1	fresh organic smell
4. Moyengully, Mt Annan	8.45	1/2	faint organic smell
5. Blackgum	8.46	0	no odour present
6. Aotus Crt	8.45	0	no odour present
7. Waterworth & Hacking	8.53	0	nil identified
8. William Howe Regional Park	8.55	0	nil identified
9. Rogers Way Mt Annan	8.36	0	no odour detected
10. Bilson Road Spring Farm	—		
11. Richardson Rd	—		
12. LKD West	—		
13. LKD East	—		
14. Austen Blvd	—		
15. Mooney St	—		
not visited today			
Additional Comments and Observations			
mt annan @ fenceline of SUEZ + commeline a faint organic odour was present. Upon double back @ 8.48 identified as still present.			
Investigation outcome and actions undertaken			
Review of operations on site = spreading & decontamination of incoming greenwaste from kerbside collection			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
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Spring Farm ARRT - Weekly Odour Monitoring



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Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.

Date: 1 May 2019	Start time: 7.03am	Finish time: 8.00am	
Completed by: K Gee	Signature: <i>[Signature]</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 9.7 km/h	Wind Direction: SE	Air temp: 14°	
Humidity: 95.76 %	Other Conditions: Clear	Rain: Nil	
Reason for Monitoring			
Call from suez employee on route to work noticed slight organic odour close to site			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.31	0	no odour present
2. Mt Annan Drive Mt Annan	7.35	0	no odour present
3. Commelina & Caley	7.38	0	no odour present
4. Moyengully, Mt Annan	7.39	0	no odour detected
5. Blackgum	7.42	0	no odour from site evident
6. Aotus Crt	7.41	0	no odour @ No 29
7. Waterworth & Hacking	7.31	0	no odour
8. William Howe Regional Park	7.29	0	Earthy grassy smell
9. Rogers Way Mt Annan	7.03	0	no odour in area
10. Bilson Road Spring Farm	7.18	0	no odour detected
11. Richardson Rd	7.15	0	no odour @ Caltex
12. LKD West	7.12	0	no odour detected
13. LKD East	7.55	0	nil
14. Austen Blvd	7.20	1	Slight organic odour
15. Mooney St	7.21	1	Slight organic odour
Barrow Rd	7.57	1	Slight organic smell
Additional Comments and Observations			
Fenceline site tour revealed organic smell in immediate tipping area. No odour identified at site front gate or side gate @ glenlee rd.			
Investigation outcome and actions undertaken			
All doors @ ARRT operational. Biofilter working & 1 tunnel door open only			
Wind direction consistent with SPARRF & Trypoddi			

Spring Farm ARRT - Weekly Odour Monitoring

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Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

See near map saved
images for 7am & 8.30am
wind directions.
✍

Spring Farm ARRT - Weekly Odour Monitoring



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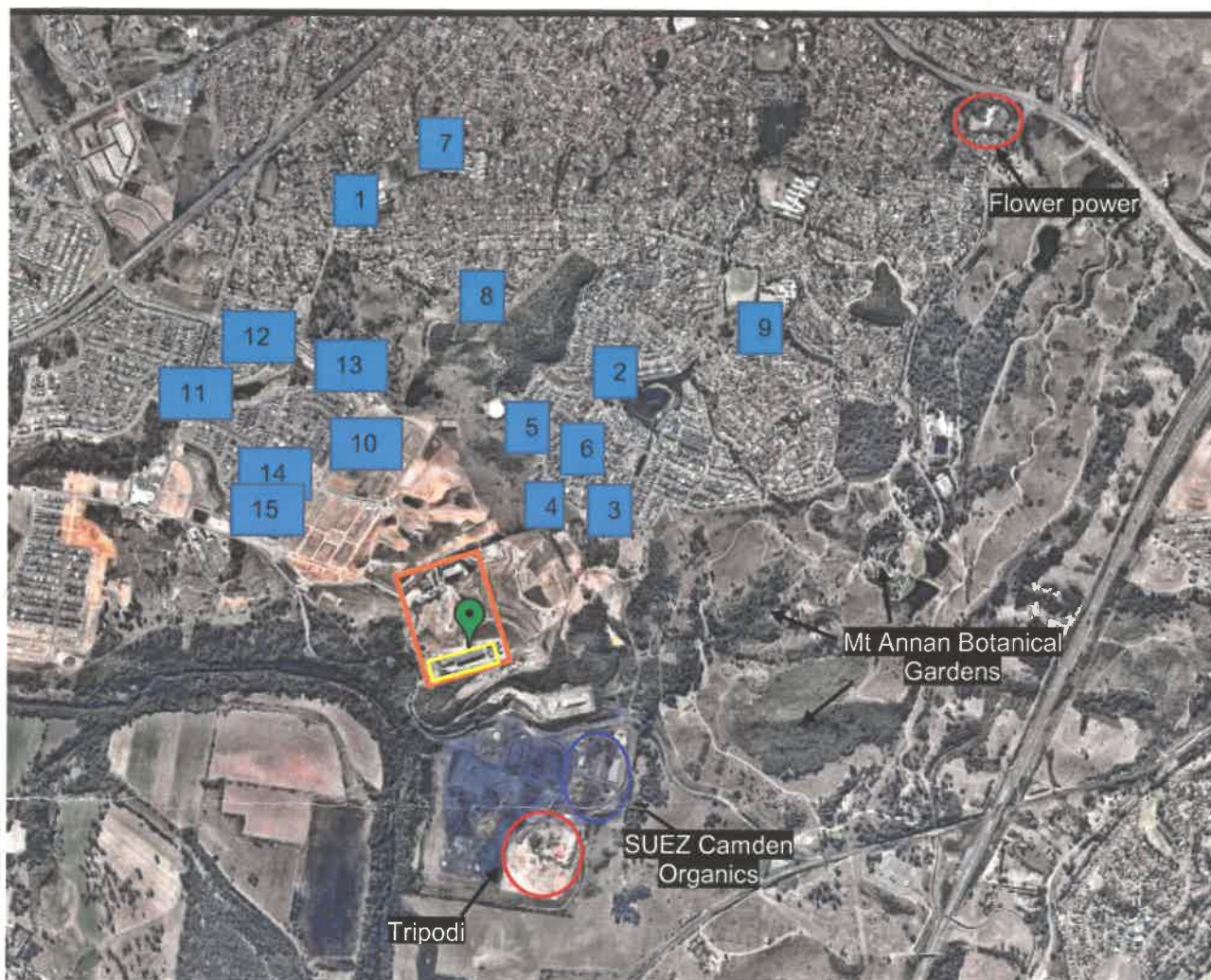
Instructions: External odour tours to be completed proactively, during adverse weather conditions or in response to an odour complaint. Fill in complaint details if in response to a complaint.





Date: 23 05 19	Start time: 7.20	Finish time: 12.30 pm	
Completed by: K Gee	Signature: <i>KG</i>		
Other Attendees:			
Weather Conditions			
Wind Speed: 7 km/h	Wind Direction: SW	Air temp: 11°	
Humidity: 83%	Other Conditions: Clear	Rain: Nil	
Reason for Monitoring			
multiple complaints via text, suez line, social media, local radio. EPA notified via phone			
Odour Monitoring Results			
Checkpoints (mark on map)	Time	Odour Level (0-5)	Comments / Description of Odour
1. Waterworth & Welling Drive	7.20	5	"Rotten egg gas"
2. Mt Annan Drive Mt Annan	7.23	5	
3. Commelina & Caley	7.24	5	strong sulphur
4. Moyengully, Mt Annan	7.24	5	smell across all
5. Blackgum	7.26	5	areas visited
6. Aotus Crt	7.25	5	today.
7. Waterworth & Hacking	7.20	5	same consistent smell
8. William Howe Regional Park	7.26	5	& strength across
9. Rogers Way Mt Annan	—	5	all areas ~
10. Bilson Road Spring Farm	7.37	5	suburbs.
11. Richardson Rd	7.32	5	
12. LKD West	7.33	5	odour dissipated by
13. LKD East	up to 12.30pm	5	10.30am & no longer
14. Austen Blvd	7.34	5	detectable
15. Mooney St	7.35	5	
Mt Annan, Gregory Hills, Harrington Park, Over Park, Smethon Gange			
Additional Comments and Observations			
Call @ 7.32 regarding "Rotten egg gas" & "Blood & Bone" smell that is very offensive. Contact from St Clares Primary school, Elizabeth Macarthur high school			
Investigation outcome and actions undertaken			
Internal site investigation of st & Camden sites. Nil odour source identified. Engaged external parties for investigation Tom Rife - AGL, John Leighton EOL, Wayne Bissett Demeng, Corey, Camden Council.			

Ref to CAR KGE-3F55B3

Spring Farm ARRT - Weekly Odour Monitoring

Document #: FORM026.4.39



Legend:	
	SUEZ Site Boundary
	SFARRF Facility
	Other facilities
	Odour Assessment Point

APPENDIX K FIRST FLUSH SAMPLING RESULTS

CERTIFICATE OF ANALYSIS

20/12/2018

Client Details:

Richardson Road Landfill
275 Richardson Road
Sydney NSW 2570

Laboratory Details:

SAWT Laboratory
SUEZ Recycling & Recovery
1725 Elizabeth Drive
Kemps Creek NSW 2178
Australia

Attention:

Kelly Gee

Job Reference :

18/1361

Sample Login Details:

Client Reference: Richardson Road Landfill
No of Samples: 1
Date Sample Received: 18/12/2018

Analysis Details:

- The results apply to the samples as received unless otherwise stated in the report.
- Samples will be disposed after 7 days from issuing final report unless prior arrangements are made.
- This document is not to be reproduced except in full without written approval of the laboratory.

Report Details:

Date Report Issued: 20/12/2018

This report supercedes any previous report(s) with this reference.

Results Approved By:

Colin Chen
Laboratory Supervisor

Job Reference: 18/1361
Client Reference: Richardson Road Landfill

Test Description	Units	METHODREFERENCE	18/1361-1 First Flush ARRF
pH in Water		APHA-4500 H+B	7.0
Electrical Conductivity	µS/cm	APHA-2510 B	480
Ammonia-NH3-N	mg/L	USEPA-350.3	0.7
Total Suspended Solids	mg/L	APHA-2540 D	2,590
Oil & Grease*	mg/L	ASTM D 7066 - 04	6.1

Note: * NATA Accreditation does not cover the performance of this service.

CERTIFICATE OF ANALYSIS

Work Order : **ES1832735**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM
Telephone : **----**
Project : **----**
Order number : **4600002390**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **SY/384/16**
No. of samples received : **1**
No. of samples analysed : **1**

Page : 1 of 2
Laboratory : Environmental Division Sydney
Contact : Customer Services ES
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 02-Nov-2018 11:30
Date Analysis Commenced : 02-Nov-2018
Issue Date : 08-Nov-2018 12:35



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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				Arrf-021118-First Flush	----	----	----	----
Client sampling date / time				02-Nov-2018 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1832735-001	-----	-----	-----	-----
Result					----	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	7.61	----	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	1000	----	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	485	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	1.83	----	----	----	----
EP020: Oil and Grease (O&G)								
Oil & Grease	----	5	mg/L	7	----	----	----	----

CERTIFICATE OF ANALYSIS

Work Order : **ES1908373**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : MS KELLY GEE
Address : 275 RICHARDSON ROAD
 SPRING FARM 2570
Telephone : ----
Project : SY/384/16
Order number : 4600002226
C-O-C number : ----
Sampler : KELLY GEE
Site : ----
Quote number : SY/384/16
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 2
Laboratory : Environmental Division Sydney
Contact : Customer Services ES
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 19-Mar-2019 15:30
Date Analysis Commenced : 19-Mar-2019
Issue Date : 15-Jan-2020 13:07



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- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				ARRF First Flush	----	----	----	----
Client sampling date / time				19-Mar-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1908373-001	-----	-----	-----	-----
Result				----	----	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	7.72	----	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	852	----	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	166	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	9.47	----	----	----	----
EP020: Oil and Grease (O&G)								
Oil & Grease	----	5	mg/L	5	----	----	----	----

CERTIFICATE OF ANALYSIS

26/06/2019

Client Details:

Richardson Road Landfill
275 Richardson Road
Sydney NSW 2570

Laboratory Details:

SAWT Laboratory
SUEZ Recycling & Recovery
1725 Elizabeth Drive
Kemps Creek NSW 2178
Australia

Attention:

Kelly Gee

Job Reference :

19/0709

Sample Login Details:

Client Reference: Richardson Road Landfill
No of Samples: 1
Date Sample Received: 07/06/2019

Analysis Details:

- The results apply to the samples as received unless otherwise stated in the report.
- Samples will be disposed after 7 days from issuing final report unless prior arrangements are made.
- This document is not to be reproduced except in full without written approval of the laboratory.

Report Details:

Date Report Issued: 26/06/2019

This report supercedes any previous report(s) with this reference.

Results Approved By:

Colin Chen
Laboratory Supervisor

Job Reference: 19/0709
Client Reference: Richardson Road Landfill

Test Description	Units	METHODREFERENCE	19/0709-1 20190607 First Flush
pH in Water		APHA-4500 H+B	7.6
Electrical Conductivity	µS/cm	APHA-2510 B	515
Ammonia-NH3-N	mg/L	USEPA-350.3	1.2
Total Suspended Solids	mg/L	APHA-2540 D	280
Oil & Grease*	mg/L	ASTM D 7066 - 04	3.3

Note: * NATA Accreditation does not cover the performance of this service.

CERTIFICATE OF ANALYSIS

Work Order : **ES1924640**
Client : **SUEZ RECYCLING & RECOVERY PTY LTD**
Contact : **MS KELLY GEE**
Address : **275 RICHARDSON ROAD**
SPRING FARM
Telephone : **----**
Project : **SY/384/16**
Order number : **4400002226**
C-O-C number : **----**
Sampler : **KELLY GEE**
Site : **----**
Quote number : **EN/222**
No. of samples received : **1**
No. of samples analysed : **1**

Page : 1 of 2
Laboratory : Environmental Division Sydney
Contact : Customer Services ES
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 05-Aug-2019 15:45
Date Analysis Commenced : 05-Aug-2019
Issue Date : 09-Aug-2019 10:40



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This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Ankit Joshi	Inorganic Chemist	Sydney Inorganics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 ^ = This result is computed from individual analyte detections at or above the level of reporting
 Ø = ALS is not NATA accredited for these tests.
 ~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				ARRF First Flush	----	----	----	----
Client sampling date / time				05-Aug-2019 00:00	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1924640-001	-----	-----	-----	-----
Result				----	----	----	----	----
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	8.16	----	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	709	----	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	737	----	----	----	----
EK055G: Ammonia as N by Discrete Analyser								
Ammonia as N	7664-41-7	0.01	mg/L	1.02	----	----	----	----
EP020: Oil and Grease (O&G)								
Oil & Grease	----	5	mg/L	<5	----	----	----	----

APPENDIX L NOISE ASSESMENT

HIBBS & ASSOCIATES PTY.LTD.

**Occupational Health and Safety Consultants
Environmental Management Consultants**

A.B.N. 12 608 093 134

48 / 378 Parramatta Road,
Homebush NSW 2140

P.O. Box 4266,
Homebush NSW 2140

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SUEZ RECYCLING & RECOVERY PTY LTD

ENVIRONMENTAL NOISE ASSESSMENT SPRING FARM ADVANCED RESOURCE RECOVERY FACILITY

REFERENCE No. S10765-R1

MAY 2019

Uncontrolled Electronic Copy

Copies: SUEZ Recycling & Recovery Pty Ltd
Hibbs & Associates Pty Ltd.



REPORT
of
ENVIRONMENTAL NOISE ASSESSMENT
SPRING FARM ADVANCED RESOURCE RECOVERY
FACILITY
SPRING FARM RESOURCE RECOVERY PARK, 20 BARROW
ROAD, SPRING FARM, NSW 2570

Prepared for
SUEZ RECYCLING & RECOVERY PTY LTD

Spring Farm Resource Recovery Park, 20 Barrow Road
SPRING FARM, NSW 2570

by
HIBBS & ASSOCIATES PTY LTD

48 / 378 Parramatta Road,
P.O. Box 4266,
HOMEBUSH NSW 2140

www.hibbs.com.au

Telephone: (02) 9746 3244
Facsimile: (02) 9746 3266

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Our Reference: S10765-R1

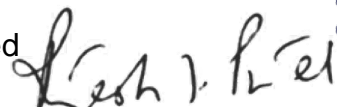
May 2019

Prepared by:



Toby Dudman
Principal Acoustics
Engineer
MAAS MIOA

Reviewed
by:



Ritesh Patel
Principal Occupational
Hygienist
MIH, MAIOH, CIH®, COH®



Date:

07 May 2019

SPRING FARM ADVANCED RESOURCE RECOVERY FACILITY ENVIRONMENTAL NOISE ASSESSMENT

EXECUTIVE SUMMARY

This report presents the findings of an Environmental Noise Assessment of Spring Farm Advanced Resource Recovery Facility (ARRF) at Spring Farm Resource Recovery Park, 20 Barrow Road, Spring Farm, NSW 2570. The aim of this report is to assess the noise emission performance of the ARRF according to condition 3.6 of its approval and section 5.10 of the site's Environmental Management Plan (EMP). This assessment is of the Annual Reporting period from 10 October 2017 to 09 October 2018.

The results of the assessment show that noise immissions from the ARRT were below the noise limits contained with Condition 2.13 and EPL 12588. We confirmed the results with attended survey measurements and observations onsite and offsite at Commelina Drive.

It was quiet at Commelina Drive during the surveys. Ambient noise levels were low. Anonymous industrial or vehicle type sounds were barely discernible intermittently during the survey. Nothing we heard was attributable conclusively to the ARRF operation. The results of the attended survey at Commelina Drive show that direct measurements at NSRs cannot evaluate the noise emission performance of the ARRF. This confirms that the approach of this assessment (*'Direct measurement at alternative or intermediate location/s'* as described in Section 7.1.1 of the Noise Policy for Industry) is the proper and robust approach for this situation.

SUEZ has received no noise complaints about the ARRT to date. This is what we expect because the calculated and observed noise immission levels are very low. The ARRT was inaudible at Commelina Drive during our surveys in the early morning and daytime. This assessment shows that the noise emission performance of SUEZ Spring Farm ARRF accords with the requirements of Condition 3.6 of its approval and section 5.10 of the site's Environmental Management Plan (EMP).

SPRING FARM ADVANCED RESOURCE RECOVERY FACILITY ENVIRONMENTAL NOISE ASSESSMENT

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1. INTRODUCTION

This report presents the findings of an Environmental Noise Assessment of Spring Farm Advanced Resource Recovery Facility (ARRF) at Spring Farm Resource Recovery Park, 20 Barrow Road, Spring Farm, NSW 2570. The aim of this report is to assess the noise emission performance of the ARRF according to condition 3.6 of its approval and section 5.10 of the site's Environmental Management Plan (EMP). This assessment is of the Annual Reporting period from 10 October 2017 to 09 October 2018.

The study follows the procedures and method outlined in our approved proposal [1]. Ms Kelly Gee, Compliance Officer at SUEZ Recycling & Recovery Pty Ltd authorised the work. Mr Toby Dudman MAAS MIOA, Principal Acoustics Engineer from Hibbs conducted the site work and assessment. We wish to acknowledge, and express our gratitude, for the assistance provided by Kelly Gee and all the staff at Spring Farm with conducting the surveys and assessments.

Appendix A has background information about the site. This includes a description of the site and activities, the approval conditions, relevant extracts from the EMP and a map of noise sensitive receptors (NSRs).

2. REPORT LIMITATIONS AND DISCLAIMER

Hibbs and Associates Pty Ltd prepared this report for SUEZ Recycling & Recovery Pty Ltd solely for the purposes set out herein and we do not intend that any other person use or rely on the contents of the Report. The information contained in this report is based on a limited review of the site, interviews with site personnel and review of documentation provided to Hibbs & Associates Pty Ltd at the time of the review. Whilst the information contained in the Report is accurate to the best of our knowledge and belief, Hibbs & Associates Pty Ltd cannot guarantee the completeness or accuracy of any of the descriptions or conclusions based on the information supplied to it or obtained during the investigations, site surveys, visits and interviews. Furthermore, conditions can change within limited periods of time, and this should be considered if the Report is to be used after any elapsed time period subsequent to its issue.

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3. METHOD

The assessment follows relevant guidance in the NSW Noise Policy for Industry (NPI) [2]. The ARRF is distant from the nearest NSRs (Figure A.3). Noise from the site is extremely low and masked by the ambient noise at the NSRs. The NPI (chapter 7) describes the problem thus:

A noise limit applies to the noise from a particular development/activity and not to general ambient noise. Therefore it is often necessary to use techniques to attempt to separate the noise from a facility versus noise from other sources. There is often no easy way to do this, and professional judgement and multiple techniques are sometimes required in combination to give the necessary level of confidence in the results.

Direct measurement of noise from the development is impractical at all NSRs and impossible at Glenlee House. Chapter 7 of the NPI contains guidance on monitoring performance to determine compliance with a noise limit. Section 7.1.1 of the NPI lists four options for noise monitoring. The second method, 'Direct measurement at alternative or intermediate location/s', is appropriate to this situation.

Previous assessments evaluated the ARRF noise immission at NSRs using direct measurements of sources on site and modelling of noise immissions to NSRs. This assessment verified the model and source definitions using direct measurements at an intermediate location on site where the source noise level is separate from the general ambient level (Figure A.3). Appendix B describes the validation survey measurements and model source terms. The model results match the survey measurements (Table B.3) well and correlate with the vehicle flow excellently. This demonstrates that the model reliably predicts noise emissions from the ARRT depending on weighbridge vehicle flow data.

SUEZ provided weighbridge data covering the Annual Reporting period from 10 October 2017 to 09 October 2018. We analysed this (Figure B.1) to determine the peak vehicle movement numbers during each assessment period (Table A.3). We factored the measured on-site noise levels for peak vehicle flows and applied site-specific attenuations for distance and terrain using ISO 9613-2 [3] and meteorological correction factor K4 from the CONCAWE report 4/81 [4]. The assessment adopted the worst-case realistic meteorological conditions (i.e. highest noise immission level at NSRs) from the two options contained within the note to condition 2.13. This is a temperature inversion equivalent to wind speed 2 m/s, Pasquill Class F, Meteorological Category 6 during the night-time and in the early morning (dawn). Temperature inversions will not occur during the daytime. The assessment adopts wind speed 3 m/s, Pasquill Class B, Meteorological Category 4 during the daytime.

2 NSW Environmental Protection Agency 2017. *Noise Policy for Industry*. Environmental Protection Agency, Sydney.

3 International Standard ISO 9613-2:1996 *Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation*

4 CONCAWE Report 4/81. (1981) *The Propagation of Noise from Petroleum and Petrochemical Complexes to Neighbouring Communities*

4. RESULTS

4.1 Survey

We conducted a set of attended measurements at the southwestern corner of Commelina Drive on 02 April 2019 in the early morning and daytime. The weather was dry and calm with no cloud cover. We obtained weather details (Table 4.1) from the Bureau of Meteorology station at Campbelltown (IDN60800). This measurement location was downwind of the ARRT during the survey.



Figure 4.1: Survey at Commelina Drive
(Looking: west, southwest towards ARRT and east, respectively)

Table 4.1: Survey Results

Start Time	$L_{Amax,15min}$ (dB)	$L_{Amin,15min}$ (dB)	$L_{Aeq,15min}$ (dB)	$L_{A10,15min}$ (dB)	$L_{A90,15min}$ (dB)	Temp. (deg C)	Mean wind speed (m/s)	Wind direction	Relative humidity (per cent)
5:30	59	39	43	44	41	12	0.6	S	93
6:00	57	37	43	45	41	12	1.9	SSW	94
9:35	61	35	42	44	38	18	3.1	SSW	77
9:55	71	35	43	44	37	19	3.1	SSW	73

It was quiet at Commelina Drive during the surveys. Ambient noise levels were low. A constant low-level drone from distant traffic set the background ($L_{A90,15min}$) noise level. We think that the traffic source was Mount Annan Road. It is interesting that the minimum ($L_{Amin,15min}$) and background ($L_{A90,15min}$) noise levels are slightly higher in the early morning (around 06:00) than later in the day (around 10:00). We expect that this is due to higher flows during the morning peak traffic period. Crickets, psithurism (wind in the trees), bird calls and occasional planes also contributed to the soundscape during the survey.

The first two measurements were during the start of operations at the ARRT. This is the end of the period that Condition 2.13 defines as 'night' (Table A.3), which ends at 07:00. The minimum ($L_{Amin,15min}$) noise levels of these measurements exceeded the noise limit by 2 to 4 dB. The minimum ($L_{Amin,15min}$) noise levels of the two later measurements around 10:00 were 4 dB below the daytime noise limit.

Anonymous industrial or vehicle type sounds were barely discernible intermittently during the survey. There was a just audible occasional clattering sound that we attributed to part of the plant in the MRF. Nothing was clearly audible or identifiable in terms of character or location. Nothing we heard was attributable conclusively to the ARRF operation.

It is impossible to separate industrial noise immissions from the ambient soundscape of environmental and natural sounds using temporal or spectral acoustic parameters individually or in combination. There are no characteristics to separate ARRT noise from the MRF or any other industrial noise source in the area. The results of the attended survey at Commelina Drive show that direct measurements at NSRs cannot evaluate the noise emission performance of the ARRF. This confirms that the approach of this assessment (*'Direct measurement at alternative or intermediate location/s'* as described in Section 7.1.1 of the Noise Policy for Industry) is the proper and robust approach for this situation.

4.2 Assessment

The assessment is based on three sets of model inputs (Table 4.2). The vehicle flow is the peak flow during the assessment period from the annual weighbridge data (Figure B.1). The 'Day' assessment includes vehicles unloading at the ARRT, organics and the tank farm concurrently. The weighbridge data shows that this is rare because the vehicle flow (Figure B.1) to organics is low and the flow to the tank farm is very low.

Table 4.2: Model Input

Assessment	Applicable Hours	Vehicle Flow in 15-mins	Organics Biofilter fan	Organics Trommel and Loader	ARRT Unloading	Organics Unloading	Tank Farm Unloading
Night	04:30 - 06:00	0	√				
Early morning	06:00 - 07:00	5	√	√	√	√	
Day	07:00 - 16:00	25	√	√	√	√	√

Table 4.3: Assessment Results

Assessment	Applicable Hours	Noise Limit $L_{Aeq,15min}$ (dB)	Noise Immission, $L_{Aeq,15min}$ (dB) at East Village	Noise Immission, $L_{Aeq,15min}$ (dB) at Commelina Drive	Noise Immission, $L_{Aeq,15min}$ (dB) at Glenlee House
Night	04:30 - 06:00	35	25	17	<17
Early Morning	06:00 - 07:00	35	32	22	<22
Day	07:00 - 16:00	39	35	22	<22

The average vehicle time on site (in-between arriving and leaving the weighbridge) is greater than 15-minutes (Table B.2). Most of this time is driving within the site. Nevertheless, we have modelled unloading throughout the 15-minute $L_{Aeq,15min}$ assessment calculation period to keep the assessment robust.

The night-time criterion of 45 dB $L_{A01,1min}$ relates to the potential for impulsive noises (i.e. bangs and clatters) to disturb sleep. The biofilter fans at the composting tunnels are the only night-time sources in this study. This source does not emit impulses. Consequently, there will be no exceedance of the night-time criterion of 45 dB $L_{A01,1min}$.



Figure 4.2: $L_{Aeq,15m}$ noise contours - Night

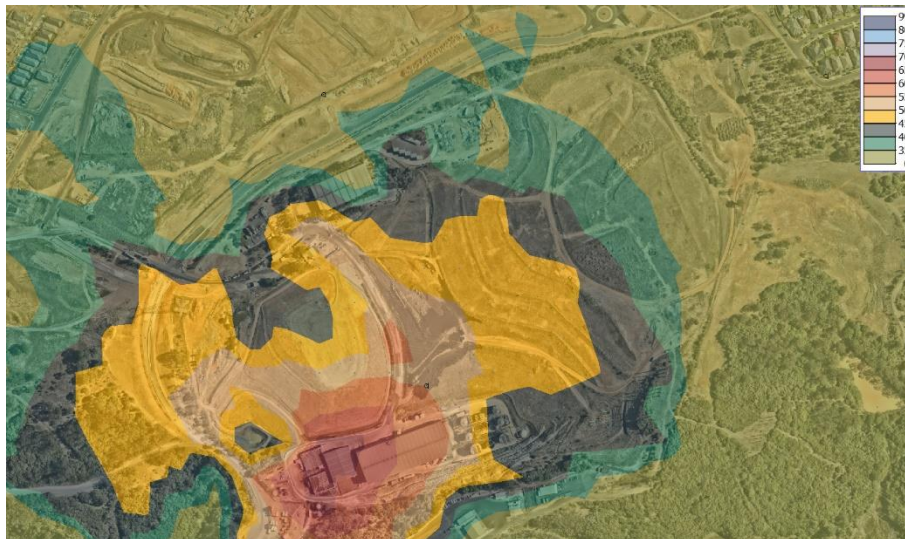


Figure 4.3: $L_{Aeq,15m}$ noise contours - Early morning

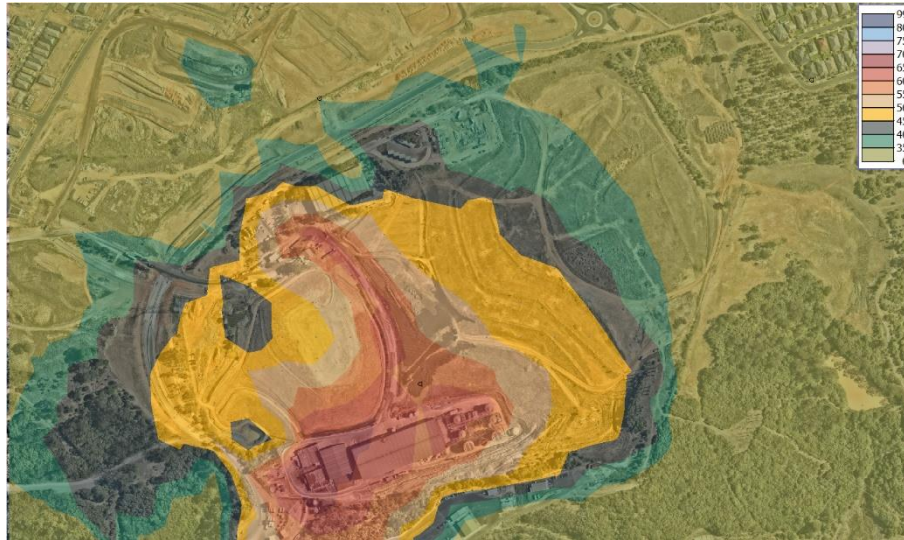


Figure 4.4: $L_{Aeq,15m}$ noise contours - Day

4.3 Environmental Noise Compliance

4.3.1 Condition 2.13

Noise emissions from the site will vary throughout the day and from day to day due to the variations in site traffic, amount of operational plant and waste composition. The assessment (Table 4.3) calculated noise immissions during the busiest periods. The results of the assessment show that noise immissions from the ARRT were below the noise limits contained with Condition 2.13 and EPL 12588 (Table A.3). Noise immissions at NSRs will be lower than those calculated by this calculation most of the time.

We have not quantified the noise immissions at Glenlee House. These will be significantly less than those predicted for NSRs at Commelina Drive. Consequently, the assessment proves that there were no exceedances of the noise limits at Glenlee House.

4.3.2 Condition 3.6

Condition 3.6 requires (inter alia)

- *a comparison of the results of the noise monitoring required under a) above, and the predicted noise impacts detailed in the documents listed under condition 1.1 [5] of this approval*
- *details of any entries in the Complaints Register (condition 6.3 of this approval) relating to noise impacts*

We cannot compare the results of this calculation (Table 4.3) with those predicted in the WSN's Environmental Assessment (EA) directly because there is no separate calculation for 'early morning' and no prediction at Commelina Drive. The subject of WSN's EA included waste processing equipment in the ARRT that SUEZ has since decommissioned. Consequently, the noise emissions will be different.

Table 4.4: EA and assessment comparison

Assessment	East Village	Spring Farm Adjacent	Commelina Drive	Henrietta Drive	Glenlee House	Glenlee House
	This assessment	WSN EA	This assessment	WSN EA	This assessment	WSN EA
Night	25	39 to 48	17	26	<17	<10
Early Morning	32	NA	22	NA	<22	NA
Day	35	52 to 59	22	34	<22	20

SUEZ has received no noise complaints about the ARRT to date. This is what we expect because the calculated and observed noise immission levels are very low. The ARRT was inaudible at Commelina Drive during our surveys in the early morning and daytime.

4.3.3 SUEZ Environmental Management Plan

Section 5.10 of SUEZ's Environmental Management Plan (EMP) (Table A.4) states that

the purpose of [the site's] noise management is to ensure that no loss of amenity is caused to neighbours from noisy operations associated with the organics facility

The results of this assessment and the absence of complaints show that SUEZ has achieved this purpose at Spring Farm ARRT. With reference to Section 5.10.1 (Table A.4), SUEZ does not emit unacceptable noise (including vibration) beyond the boundaries of the premises. Furthermore, Section 5.10.1 states that

- SUEZ will
 - use appropriate and well-maintained machinery
 - conduct process activities during specified operating hours
- All vehicles will
 - limit the use of compression braking
 - adhere to the sign-posted speed limits
 - be operated between the allowed hours of operation

We cannot comment on these specifically because they relate to site management and the choices and maintenance of waste management equipment. Nevertheless, all equipment sounded like it was well maintained (i.e. no whines, judders or clattering

sounds), we did not hear any compression braking and all trucks seemed to be driven slowly during our brief site attendance.

5. SUMMARY AND CONCLUSIONS

The results of the assessment show that noise immissions from the ARRT were below the noise limits contained with Condition 2.13 and EPL 12588. We confirmed the results with attended survey measurements and observations onsite and offsite at Commelina Drive.

It was quiet at Commelina Drive during the surveys. Ambient noise levels were low. Anonymous industrial or vehicle type sounds were barely discernible intermittently during the survey. Nothing we heard was attributable conclusively to the ARRF operation. The results of the attended survey at Commelina Drive show that direct measurements at NSRs cannot evaluate the noise emission performance of the ARRF. This confirms that the approach of this assessment (*'Direct measurement at alternative or intermediate location/s'* as described in Section 7.1.1 of the Noise Policy for Industry) is the proper and robust approach for this situation.

SUEZ has received no noise complaints about the ARRT to date. This is what we expect because the calculated and observed noise immission levels are very low. The ARRT was inaudible at Commelina Drive during our surveys in the early morning and daytime. This assessment shows that the noise emission performance of SUEZ Spring Farm ARRF accords with the requirements of Condition 3.6 of its approval and section 5.10 of the site's Environmental Management Plan (EMP).

SUEZ RECYCLING & RECOVERY PTY LTD ENVIRONMENTAL NOISE ASSESSMENT

Appendix A BACKGROUND INFORMATION

A1 SITE DESCRIPTION

A1.1 Noise Sources

SUEZ Recycling & Recovery Pty Ltd is a resource recovery, recycling and waste management company that operates over 100 sites in Australia. Their website [6] describes Spring Farm Advanced Resource Recovery Facility as follows:

Spring Farm ARRT Facility

The Spring Farm Advanced Resource Recovery Park (formerly Macarthur Resource Recovery Park and originally Jacks Gully Waste and Recycling Centre) spans 38 hectares and over 100,000 cars and trucks use the park each year. It consists of a number of linked areas for processing of mixed solid waste (MSW) and organic material. The facility incorporates:

An anaerobic digestion facility and electricity plant;

A tunnel composting facility for organics processing; and

A mechanical pre-treatment area, where non-organic materials are removed from MSW, leaving the organic material ready for further processing at the nearby Kemps Creek SAWT ARRT Facility.

Material Recycling Facility

Materials Recycling Facility (MRF) is like a giant factory where the recyclable materials that are collected from homes and businesses are taken to be sorted into different types or “streams” such as paper, plastics and aluminium for sale into local and overseas markets, and a resource recovery area for public drop off. Through its council collections contract, the Spring Farm site currently services more than 104,000 households in four adjoining council areas

Spring Farm Engineered Landfill (smart cell)

Located at SUEZ's Spring Farm Advanced Resource Recovery Facility site, the Spring Farm smart cell® is a solid waste, non-putrescible smart cell® operating on a site of approximately 84 hectares. This landfill not accepting waste anymore.

6 SUEZ Recycling & Recovery Pty Ltd company website. <http://www.sita.com.au/facilities/map-of-australia/spring-farm/resource-recovery-park> [Accessed 10/05/2018]

The landfill ceased operation in May 2016 and capping is in progress. The ARRT processing and energy generation facility is not operational. The reception hall of the ARRT building is a bulking facility. SUEZ has told us that the Project Approval (05_0098) granted by the Minister for Planning for Jack's Gully Alternative Waste Technology Facility (now known as Spring Farm Advanced Resource Recovery Facility) on 7 September 2006 and its subsequent modifications (26 August 2010 and 10 December 2015) does not include the MRF. Table A.1 lists the significant noise generating SUEZ facilities at Spring Farm Advanced Resource Recovery Facility included in this study (i.e. those covered by Project Approval 05_0098).

Table A.1: Noise Sources

Name		Description
1	ARRT Reception Hall	Refuse Collection Vehicles (RCVs) tip into the hall. A FEL loads trucks with waste for transportation off site.
2	Tank Farm	Liquid Treatment Facility. Pumps loaded and unload tankers. The most significant noise source is a blower.
3	Organics	RCVs deliver green waste into a covered tipping pit. Two FELs load material in/out of composting tunnels (b) and a trommel (c). The trommel is located to the west of the composting tunnels. The Biofilter fan is to the southwest of the composting tunnels
4	On-site vehicles	Trucks of various types



Figure A.1: Inside ARRT Waste Bulking



Figure A.2: Organics Reception (left) and Tunnel & Trommel (right)

A1.2 Operational Hours

Table A.2 shows the approved operating hours contained within Conditions 2.14 and 2.15 of the approval.

Table A.2: Approved operating hours

Condition	Current
2.14	The Proponent shall ensure that heavy vehicles associated with the project do not enter or exit the site between 10pm and 7am, unless these movements are due to circumstances beyond the control of the Proponent.
2.15	Notwithstanding condition 2.14, the Proponent shall ensure that all waste to be processed at the site is received between the following hours: <ul style="list-style-type: none"> a) 7:00 am to 5:00 pm, Mondays to Fridays, inclusive; b) 8:00 am to 4:00 pm, Saturdays and Sundays; and c) 7:00 am to 2:00 pm on public holidays.

A1.3 Noise Sensitive Receptors

The nearest Noise Sensitive Receptors (NSRs) are existing houses at Commelina Drive to the east of the site and proposed houses in the East Village development to the north. The Project Approval refers to Glenlee Historic House, which is over 1.6 km to the southeast of the site.



Figure A.3: ARRT and NSRs

A1.4 Terrain

Spring Farm Advanced Resource Recovery Facility is in a deep bowl. The ARRT building is on land that is around 10 m lower than the land at the site entrance. The capped landfill forms steep curved hills either side of the spine road. There is a steep bund on the northern boundary of the site between the site and the proposed housing in East Village. The top of the bund is about 10 m above the ground level at the proposed houses. The terrain totally occludes the site sources from the NSRs. The spine road is in a steep valley that gets progressively steeper at the southern end. There is a massive rock wall to the south of the ARRT building. The terrain provides significant noise attenuation between the site sources and NSRs.



Figure A.4: Panorama (northwest to southwest) from Top of Landfill Hill

A2 NOISE MANAGEMENT

A2.1 Regulatory Framework

The relevant regulations, standards and guidelines are:

- Protection of the Environment Operations Act 1997 (POEO Act)
- Protection of the Environment Operations (Noise Control) Regulation 2008 (Noise Control Regulation)
- NSW *Industrial Noise Policy* (INP) 2000
- NSW *Noise Policy for Industry* (NPI) 2017
- Australian Standard (AS) 1055:1997 *Acoustics - Description and measurement of environmental noise*,
 - *Part 1: General procedures*
 - *Part 2: Application to specific situations*
 - *Part 3: Acquisition of data pertinent to land use.*

A2.2 Approval Conditions

Project Approval 05_0098 provides the noise criteria for the site. Table A.3 reproduces Conditions 3.6, 2.13 and the accompanying note to Condition 2.13. Condition 2.13 has the same noise limits as the site's Environmental Protection Licence (EPL) 12588.

Table A.3: Condition 2.13 / EPL 12588 Noise Criteria

3.6	<p>Within 90 days of the commencement of operations associated with the development, and annually thereafter, the Proponent shall assess the noise emission performance of the development during a period in which the development is operating under normal operating conditions. The assessment shall include, but not necessarily be limited to:</p> <p>a) noise monitoring, consistent with the guidelines provided in the New South Wales Industrial Noise Policy (EPA, 2000), to assess compliance with condition 2.13 of this approval;</p> <p>b) a comparison of the results of the noise monitoring required under a) above, and the predicted noise impacts detailed in the documents listed under condition 1.1 of this approval; and</p> <p>c) details of any entries in the Complaints Register (condition 6.3 of this approval) relating to noise impacts.</p> <p>A report providing the results of the program shall be submitted to the Director-General and the DEC within 28 days of completion of the testing required under a).</p>
2.13	<p>The Proponent shall ensure that noise from the project at all existing and proposed residences, including Glenlee House, does not exceed:</p> <p>a) a LAeq(15 minute) noise emission criterion of 39 dB(A) during the day/evening;</p> <p>b) a LAeq(15 minute) noise emission criterion of 35 dB(A) during the night; and</p> <p>c) a LA1(1 minute) noise emission criterion of 45 dB(A) during the night.</p>
Note	<p>For the purpose of this condition, day is defined as the period from 7am to 6pm, Monday to Saturday, and 8am to 6pm, Sundays and Public Holidays. Evening is defined as the period from 6pm to 10pm, Night is defined as the period from 10pm to 7am, Monday to Saturday, and 10pm to 8pm, Sundays and Public Holidays.</p>

	<p>The noise emission limits apply under meteorological conditions of wind speeds up to 3 m/s at 10 metres above the ground level or temperature inversion conditions of 3°C/100 m and wind speed up to 2 m/s at 10 metres above the ground. To determine compliance with this condition, noise from the development must be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary.</p> <p>Noise from the site is to be measured at 1m from the dwelling façade to determine compliance with LA1 (1 minute) noise criterion specified in condition 2.13c. However, where it can be demonstrated that direct measurement of noise from the development is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.</p>
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A2.3 SUEZ Environmental Management Plan

Table A.4: Extract from EMP

<p>5.10. Noise</p> <p>The management of noise is to be conducted in accordance with the requirements of the <i>Site Maintenance – Infrastructure Facilities SOP</i>. The purpose of noise management is to ensure that no loss of amenity is caused to neighbours from noisy operations associated with the organics facility. Independent noise monitoring will be conducted annually. Noise from the premises will be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise levels in the licence.</p> <p>Annual monitoring results will be sent to the EPA.</p> <p>5.10.1. Management Strategy</p> <p>In accordance with the EPL, unacceptable noise (including vibration) must not be emitted beyond the boundaries of the premises. The following general measures are taken to reduce noise onsite:</p> <ul style="list-style-type: none"> ● The use of appropriate and well-maintained machinery manufactured to appropriate design specifications ● Process activities conducted during specified operating hours. <p>In addition, vehicles entering the site must adopt the following measures to ensure noise is minimised by restricting the number of waste transport vehicles in operation during the early hours of the day:</p> <ul style="list-style-type: none"> ● All vehicles are to limit the use of compression braking; ● All vehicles are required to adhere to site sign posted speed limits; and ● All vehicles are to be operated between the allowed hours of operations.

SPRING FARM ADVANCED RESOURCE RECOVERY FACILITY ENVIRONMENTAL NOISE ASSESSMENT

Appendix B MODEL AND VALIDATION SURVEY

B1.1 Source Data

- Hibbs noise surveys S9624-R1.
- EN 12354-4:2000 *Building Acoustics - Estimation of acoustic performance of buildings from the performance of elements - Part 4: Transmission of indoor sound to the outside.*

Table B.1: Noise Source Terms

Source	Unit	Octave-Band Frequency (Hz)							
		63	125	250	500	1000	2000	4000	8000
ARRT Building	L_w (dB/m ²)	68	61	60	49	44	42	31	23
Organics Reception	L_w (dB/m ²)	75	73	66	65	61	60	56	49
Moving Truck	L_w (dB)	116	109	107	104	100	98	92	88
Truck Delivery	L_w (dB)	104	100	95	92	99	90	86	84
Organics Trommel and Front-End Loader	L_w (dB)	100	98	92	100	97	94	91	79
Organics Biofilter Fan	L_w (dB)	104	101	96	103	100	97	94	82
Tank Farm Pump	L_w (dB)	82	91	86	92	85	83	77	70
Tank Farm Blower	L_w (dB)	86	96	105	104	93	84	77	72

- 12-months of site weighbridge data from 10 October 2017 to 09 October 2018.

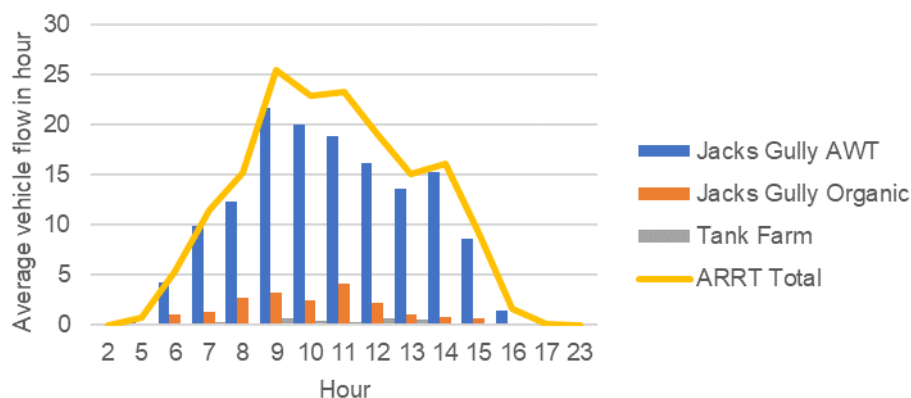


Figure B.1: Vehicle Flows

Table B.2: Vehicle Attendance Times

Site	Average of Time on site (mins)
Jacks Gully AWT	27
Jacks Gully Organic	11
Tank Farm	60

B1.2 Sound Propagation

- ISO 9613-2:1996 *Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation.*
- CONCAWE Report 4/81. (1981) *The Propagation of Noise from Petroleum and Petrochemical Complexes to Neighbouring Communities.*

B1.3 Terrain and Mapping

- SUEZ final landfill topography
- Geoscience Australia. Elevation and Depth - Foundation Spatial Data
- NearMap

B1.4 Validation Survey



Figure B.2: ARRT from intermediate measurement location

Table B.3: Model validation survey results

Start Time	Elapsed time	L_{Amax} (dB)	L_{Amin} (dB)	$L_{Aeq,T}$ (dB)	L_{A10} (dB)	L_{A90} (dB)	Total truck flow	Model result, $L_{Aeq,15m}$ (dB)
2/04/2019 7:19	0:15:00	71.8	47.0	55.4	57.5	49.4	6	55.4
2/04/2019 7:35	0:15:00	72.0	50.7	58.9	60.7	55.4	8	56.3
2/04/2019 7:56	0:15:00	75.1	46.6	54.9	58.4	49.2	5	54.7

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