Operational Environmental Management Plan - Clyde Transfer Terminal

July 2021

Quality Information

Details:	Prepared by:	Reviewed By:	Authorised by:
Name:	Anae Ressos	Rod Jones and Ramona Bachu *BSc; GDip; MEEM*	Sara Maddison *BE(Civ); BE(Env)*
Position:	Environmental Coordinator	Facilities Manager - Clyde/Greenacre Acting NSW Environmental Compliance Advisor	Operations Project Manager/ Environmental Management Representative
Signature:		 	

Company:	Veolia Environmental Services (Australia) Pty Ltd
ABN:	20 051 316 584
Line of Business:	Waste
Facility:	Clyde Transfer Terminal
Address :	322 Parramatta Road, Auburn NSW

Rev	Revision Details	Issued to	Date
0.1	First draft for internal review	NSW Resource Recovery Technical Team ANZ People & Safety SHEQ Team	06 November 2020
0.2	Second draft for internal review	NSW Resource Recovery Technical Team ANZ People & Safety SHEQ Team	29 July 2021
0.3	Final draft	Department of Planning, Industry and Environment	30 July 2021

PURPOSE	This Operational Environmental Management Plan (OEMP) has been prepared to satisfy the requirements of the Conditions of Development Consent (COC) and the Environment Protection Licence (EPL) issued for the Clyde Transfer Terminal (CTT). The OEMP is the working environmental management tool for the operation of the CTT, concentrating on key environmental issues, including supporting detailed plans for the management of water quality, waste, traffic, air quality, noise, contamination, stormwater, pest and vermin, and emergency response.

Scope	This OEMP and the supplementary Environmental Management Plans (EMPs) have been prepared to provide the management measures to be implemented to minimise potential adverse impacts on the environment during the operational stage of the CTT.
Review Frequency	Yearly

CONTENTS

Definitions/Abbreviations

See definitions in the BMS Dictionary - Only definitions directly pertaining to this document are included.

Term	Definition
AEMR	Annual Environmental Management Report
AQMP	Air Quality Management Plan
BMS	Business Management System
CCC	Community Consultative Committee
CLM	Contaminated Land and Management Act 1997
CTT	Clyde Transfer Terminal
COC	Conditions of Development Consent
DA	Development Application
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
EP&A	Environmental Planning and Assessment Act 1979 (and Regulations)
EPA	Environment Protection Authority
EPL	Environment Protection Licence
ERP	Emergency Response Plan
GHG	Greenhouse Gas Emissions
IMF	Crisps Creek Intermodal Facility
MBT	Woodlawn Mechanical Biological Treatment
NMP	Noise Management Plan
OEMP	Operational Environmental Management Plan
OMP	Odour Management Plan
PN	Pacific National
PIRMP	Pollution Incident Response Management Plan
POEO	Protection of the Environment Operations Act 1997 (and Regulations)
PPE	Personal Protective Equipment

RNMP	Noise Management Plan - Rail Operations
SCMP	Site Contamination Management Plan
SEIS	Supplementary Environmental Impact Statement
SHEQ	Safety Health Environment Quality
SMA	Sydney Metropolitan Area
SMP	Stormwater Management Plan
TPA	Tonnes per Annum
TMP	Traffic Management Plan
TNMP	Noise Management Plan - Terminal Operations
Veolia	Veolia Australia and New Zealand
VPCP	Vermin and Pest Control Plan
WARR	Waste Avoidance and Resource Recovery Act 2001
WHS	Work Health and Safety Act 2011 (and Regulation)
WMA	Water Management Act 2000
WMP	Waste Management Plan

1. Introduction

1.1. Overview

Veolia Australia and New Zealand (Veolia) operates the Clyde Transfer Terminal (CTT), which is located within a portion of the Clyde Rail Yard, at 322 Parramatta Road, Auburn, and forms part of Lot 201 of DP10076683 in the Cumberland Local Government Area (refer to Site Layout Plan in **Appendix A**).

The CTT facility has been approved to receive up to 600,000 tonnes per annum (TPA) of waste from within the Sydney Region. Waste is containerised and loaded onto rail wagons for transportation by rail to the Woodlawn Eco Precinct (owned and operated by Veolia) in the Southern Tablelands (approximately 250 kilometres southwest of Sydney) for treatment, recycling and energy recovery.

The CTT includes the following infrastructure:

- An access road for waste trucks entering and exiting the facility from Parramatta Road.
- Incoming and outgoing weighbridges to check the waste type and weight of the waste being delivered to the facility.
- An enclosed building for the unloading and handling of waste, with environmental controls such as dust suppression and odour control systems.
- A hardstand area for temporary storage and maneuvering of full and empty sealed shipping containers prior to loading onto trains.
- Rail sidings for the loading of containers onto trains for rail transport to Woodlawn.

The Minister of Planning approved the Development Application (DA) 205-08-01 on 29 August 2002, in accordance with section 89 (e) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). A number of Conditions (COC) of Development Consent (Consent) were issued to stipulate regulatory requirements for the operation of the CTT.

Since, there have been a number of modifications to the Consent which have been approved by the Department of Planning, Industry and Environment (DPIE) in accordance with section 75W of the *Environmental Planning and Assessment Act 1979*, the latest of which include:

- MOD-133-11-2006:
    - Modification of the odour control system
- DA No. 205-08-01 MOD 2:
    - Modification of condition 112
- DA No. 205-08-01 MOD 3:
    - Modification of conditions 2, 49; and
    - Deletion of conditions 97, 108, 108A, 109, 110, 111
- DA No. 205-08-01 MOD 4:
    - Permanently increase the permissible waste acceptance rate of the facility to 500,000 Tonnes per Annum (TPA);
    - Modification of conditions 8 and 10; and
    - Deletion of condition 9
- DA No. 205-08-01 MOD 5:
    - Extended operations and the increase in facility throughput from 500,000 TPA to 600,000 TPA
    - Modification to traffic management conditions
    - Modification to Condition 134 regarding community engagement

This version of the OEMP has been prepared to describe the implemented or proposed management measures to achieve compliance with these amended COCs.

In addition, the CTT also operates under an Environment Protection Licence (EPL), issued under the Protection of the *Environment Operations Act 1997* (POEO Act) by the NSW Environment Protection Authority (EPA).

1.2. Scope and Objectives

The purpose of this OEMP is to provide an overview of the potential environmental impacts assessed for the CTT during its operational phase and describe the management and mitigation measures to protect the environment on site and sensitive receivers offsite.

The objectives of the OEMP are to:

- Provide an overview of the CTT operations (refer to the Site Layout Plan in **Appendix A**);
- Provide guidance on compliance with relevant environmental legislation, including the COCs and EPL, relating to the operations of the CTT (refer to Regulatory Documents in **Appendix B**);
- Provide a means of implementing appropriate mitigation measures for the key environmental issues (refer supplementary Environment Management Plans in **Appendix C**);
- Provide a working environmental management tool for the operation of the site;
- Provide a means of identifying and concentrating on the key environmental, operational issues (refer **Section 3.4**);
- Define roles and responsibilities of the operation team (refer **Section 4.1**);
- Provide a basis for monitoring, reporting and maintaining compliance with both Veolia and regulatory requirements for the CTT (refer to Environmental Monitoring Program - CTT (MAN-14012);
- Provide a guide for the interaction with relevant Government authorities, and other stakeholders including the members of the community during the operations of the CTT (refer **Section 4.3**); and
- Comply with the Conditions of Consent relating to the operation of the development and the odour control system modification (refer to **Appendix D**).

This OEMP is a live document. The management strategies and control measures detailed within it will be reviewed and updated, where necessary, to reflect changes introduced by the CTT operational team, site specific outcomes, non-conformances and recommendations arising out of inspections, meetings and audits.

1.3. Supporting Environmental Management Plans

This section details the supplementary Environmental Management Plans that have been prepared to documentation mitigation measures for key environmental risks identified associated with the operation of the CTT, prepared in accordance with the COCs and EPL.

1.3.1. Waste Management Plan

The Waste Management Plan - MAN-14632 (WMP) provides information on control and management of incoming/outgoing waste, including the identification and removal of unauthorised waste from the general waste stream. The WMP also incorporates the Operational Contingency Management Plan. Refer to **Appendix C1**.

1.3.2. Air Quality Management Plan

The Air Quality Management Plan - MAN-14633 (AQMP) combines both the Odour Management Plan (OMP) and Dust Management Plan (DMP). The AQMP details dust and odour management and monitoring procedures. The AQMP also incorporates the Ambient Air Quality Plan during the operation of the CTT. Refer to **Appendix C2**.

1.3.3. Traffic Management Plan

The Traffic Management Plan - MAN-14634 (TMP) provides information on managing programs and control strategies for traffic movement on site. Refer to **Appendix C3**.

1.3.4. Vermin and Pest Control Plan

The Vermin and Pest Control Plan - MAN-43635 (VPCP) details management techniques to control the presence of pests and vermin on site. Refer to **Appendix C4**.

1.3.5. Stormwater Management Plan

The Stormwater Management Plan - MAN-43636 (SMP) was prepared in accordance with the Upper Parramatta Catchment Trust's On-site Stormwater Detention Handbook (2004). The plan addresses all aspects of stormwater drainage, collection, treatment and discharge and also discusses management of leachate on site. Refer to **Appendix C5**.

1.3.6. Site Contamination Management Plan

The Site Contamination Management Plan - MAN-43637 (SCMP) includes recommendations in the environmental report by the site auditor in the event any excavation works are undertaken at the CTT to manage exposure to contaminated material buried in situ. Refer to **Appendix C6**.

1.3.7. Emergency Response Plan

The Emergency Response Plan - MAN-5569 (ERP) incorporates the requirements of the Incident Response Plan (IRP) referenced in COC and the Pollution Incident Response Plan (PIRMP), which is required by EPA for licensed facilities. The ERP provides procedures for controlling and minimising potential risk for the CTT in the event of an emergency and incorporates the Fire Management Procedures for the site. Refer to **Appendix C7**.

1.3.8. Noise Management Plan

The Noise Management Plan - MAN-14638 (NMP) incorporates both the Noise Management Plan for Rail Operations (RNMP) and Terminal Operations (TNMP). The NMP details measures and strategies for managing noise arising from both rail and waste operations associated with the CTT. Refer to **Appendix C8**.

2. Statutory and Policy Considerations

This section provides an overview of the environmental planning and statutory context for the operations of the CTT. It also provides a discussion of the CTT operations in the context of Veolia's corporate environmental and sustainability policies. Veolia is committed to complying with all of its legal obligations and other voluntary commitments made by the company. Compliance to applicable regulatory requirements concerning the operations of the CTT will be achieved through:

- identifying and accessing legal and other requirements which are directly applicable to the organisation;
- consulting and involving relevant government agencies;
- internally communicating relevant information regarding legal and other requirements;
- continually auditing, reviewing and upgrading company systems, management plans and supporting documentation; and
- providing relevant training.

2.1. Legal and Other Requirements

2.1.1. Acts and Regulations

This OEMP has been developed in the context of key NSW legislation detailed below. Detailed description of legislation relevant to the CTT operations is maintained by Veolia in the NSW Compliance Register (TEM-10143).

Table 2.1 Acts and Regulations

Legislation	Purpose	Application
Clyde Waste Transfer Terminal (Special Provisions) Act 2003	The Clyde Act was approved on 08 December 2003 to enable the construction and operation of the CTT.	Attached to the Clyde Act were 137 COCs for the CTT, a number of which have since been modified to maintain relevance with the CTT's operations. A Compliance Report, detailing which COCs have been modified and the level of compliance with each COC, is provided in **Appendix D**.
Protection of the Environment Operations Act, 1997, (POEO Act, 1997)	Environment protection and pollution reduction by regulating discharges to air, water and land, as well as preserving community amenities such as impacts from traffic, noise or odour emissions. Classifying offences and issue of notices, subject to the severity of the offence. The POEO Act aims to manage pollution and waste disposal in NSW.	As an integrated development, the operation of the CTT requires licensing under the POEO Act 1997, as a Premises Based Scheduled Activity. The scheduled activity is termed "Waste storage, transfer, separating or processing, being waste facilities that store or transfer, or recover by way of separating or processing, any waste" and refers to sites that store, transfer, separate or process waste with a threshold level of "over 30,000 tonnes per year". An EPL for the CTT has been issued by the EPA (refer to **Appendix B**) and is renewed annually on the anniversary date from 15 January 2004. The most current version of the licence can be viewed on the public register located on the EPA website.

<table>
<tr>
<td></td>
<td>The NSW EPA administers it.
Part 1 of Schedule 1 of the POEO Act defines premise based scheduled activities that require an Environment Protection Licence (EPL).</td>
<td>The CTT has been issued an EPL based on the scheduled activities detailed in Table 2.1.1 below.

Table 2.1.1 Scheduled Activities under the POEO Act

<table>
<tr><th>Clause</th><th>Activity</th><th>Trigger</th></tr>
<tr><td>41</td><td>Waste processing (non-thermal treatment)</td><td>N/A</td></tr>
<tr><td>42</td><td>Waste storage</td><td>More than 4,000 tonnes stored on the premises at any one time of general waste</td></tr>
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<td>Environmental Planning and Assessment Act 1979</td>
<td>Provide the framework for assessing environmental impacts and seeking planning approval of development proposals or activities by public authorities in NSW.</td>
<td>In accordance with Section 78A of the Environmental Planning and Assessment Act (EP&A), a Development Application (DA) was submitted to the Department of Planning (DOP), supported with an Environmental Impact Statement (EIS) prepared for public exhibition (between 30 August 2001 and 22 October 2001) allowing members of the community, interest groups and government agencies to view and make written submissions on the proposed development. Following the exhibition period, the issues raised by the public and stakeholders were considered and a number of improvements to the design were made. The modifications to the design and associated improvements were outlined in the Supplementary Environmental Impact Statement (SEIS) (exhibited between 04 February 2002 and 01 March 2002).

The COCs issued by DPIE identify measures that are required to:

• prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
• set standards and performance measures for acceptable environmental performance;
• require regular monitoring and reporting; and
• provide for the ongoing environmental management of the development.
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<tr>
<td>Waste Avoidance and Resource Recovery Act (WARR Act) 2001 and its associated Regulation 2017 and amendment act 2016</td>
<td>Encourage the most efficient use of resources and to reduce environmental harm.</td>
<td>The WARR Act is the principal piece of legislation governing waste and resource management in NSW. The Act seeks to maximise the utility of resources including waste, and minimise disposal of resources to landfill.</td>
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</table>

	Ensure that resource management options are considered in the following order; • avoidance of unnecessary resource consumption; • resource recovery (including reuse, reprocessing, recycling and energy recovery); and • disposal.	The objectives of the WARR Act include: • Encouraging the most efficient use of resources; • Reducing environmental harm; • Ensuring that resources are managed against the waste hierarchy of avoidance, resource recovery, and then disposal; • Diversion of waste from landfill; • Ensuring industry takes part in reducing and dealing with waste; and • Achieving integrated, state-wide waste and resource management planning and service delivery.
Contaminated Land and Management Act 1997 (CLM Act)	Allows EPA to respond to contamination that is causing a significant risk of harm to human health or the environment, and sets out criteria for determining whether such a risk exists.	The principal object of the CLM Act is to establish a process for investigating and, where appropriate, remediating land that the EPA considers to be contaminated significantly enough to require regulation. Under the CLM Act, contamination of land is defined as: 'the presence in, on or under the land of a substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment' (CLM Act, s5). Land may be considered contaminated even if it became contaminated partly, or entirely, by the migration of contaminants into, onto or under the land from other land. A Contaminated Site Assessment of the area prior to construction of the transfer terminal concluded that the site is likely to be contaminated, originating from the imported fill identified in the soil profile. The ash material found on site was determined to have possible traces of heavy metals, lead and asbestos in the soil profile due to the history of rail operations at the site, as well as influence from the heavily industrial area around the site location. Additional contaminants such as hydrocarbon based liquids, arsenic, and other industrial and rail-based liquids may have also been introduced at the CTT. For this reason, the site was sealed with a hardstand before the construction of the CTT in order to minimise soil disturbance. The Site Contamination Management Plan (**Appendix C6**) was created as per conditions 23, 24, 53 and 103 of the COCs for the Clyde Transfer Terminal. The SCMP discusses methods used to minimise soil disturbance and dust generation during operation of the CTT.

Water Management Act (WMA) 2000	The WMA aims to facilitate the sustainable and efficient use of water in such a way that benefits the environment and communities.	The WMA provides for the preparation of water management plans that outline arrangements for water sharing, water source protection and drainage management. The CTT is located within the area covered by the 2017 Metropolitan Water Plan (DPIE, 2017), the key aims of which are to: • Provide a secure supply of water to meet the medium-term needs of Sydney, while planning for long-term goals. • Protect the health of Sydney's rivers. • Ensure water supplies are adequate throughout drought. The CTT has been designed to have a minimal impact on the quality and quantity of water discharged from the site, and to minimise the demand for potable water at the site.
Roads Act 1993	Consent of the appropriate roads authority is required to: • erect a structure or carry out a work in, on or over a public road, or • dig up or disturb the surface of a public road, or • remove or interfere with a structure, work or tree on a public road, or • pump water into a public road from any land adjoining the road, or • connect a road (whether public or private) to a classified road. Approval to work in an unclassified road (other than a Crown Road) is not required by a public authority.	The objects of the *Roads Act 1993* are to: • Set out the access rights to public roads. • Establish procedures for opening and closing public roads. • Provide for the classification of roads. • Establish the Roads and Maritime Services (RMS) and confer functions associated with road works and maintenance to the RMS and other roads authorities. • Regulate the carrying out of various activities on public roads. Consent for site access from Parramatta Road to the CTT is subject to section 138 of the *Roads Act 1993*, which was granted on 09 March 2004.
Work Health and Safety Act 2011	The main object of the *Work Health and Safety Act 2011* (WHS Act) is to provide for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces.	In line with the objectives of the WHS Act, Veolia has implemented an integrated management system (refer **Section 2.2**) to provide a consistent framework to manage the health and safety of its workers and workplaces, establish mechanism for consultation , reporting and resolving WHS issues, providing education and training and managing compliance, as reasonably practicable.

	The WHS Act requires that workers and other persons should be given the highest level of protection against harm to their health, safety and welfare from hazards and risks arising from work or from specified types of substances or plant as is reasonably practicable.	
Rivers and Foreshores Improvement Act, 1948	The purpose of the Act is for the improvement of rivers and foreshores and the prevention of erosion of lands by tidal and non-tidal waters through works and removal of obstructions.	The *Rivers and Foreshores Improvement Act, 1948* is authorised by the Department of Land and Water Conservation. Part 3A permits works within 40m of Duck River.

2.1.2. Other Requirements (Licences and Permits)

The following environmental approvals are in place for the CTT (refer **Table 2.2**)

Table 2.2 Environmental Approvals

Description	Number
Conditions of Development Consent	DA 205-08-01
	MOD-133-11-2006
	DA No. 205-08-01 MOD 2
	DA No. 205-08-01 MOD 3
	DA No. 205-08-01 MOD 4
	DA No. 205-08-01 MOD 5
Environment Protection Licence	11763

2.2. Management Systems

Veolia has committed to the highest possible levels of environmental and safety standards, auditing and reporting standards, in addition to compliance with legislative requirements. This has involved reviewing existing management systems and operations, developing policies and procedures on all aspects of our activities, established communications systems, gaining requisite accreditations and constantly reviewing our achievements. To meet these objectives, Veolia has developed and implemented management systems to

assist in meeting the corporate objective of its operations through sustainable development and allow Veolia employees access to Veolia policies and processes.

The Business Management System (BMS) is the online document management system that houses Veolia policies, corporate and regional procedures, site work instructions and other documentation. BMS incorporates the following:

- Environment, health, safety and quality of work
- Ensures compliance with national and international standards
- Single document management system
- Used in management of risk

Veolia also has an online incident and audit management system for reporting and managing incidents, recording audit and regulator enforcement information. This customised system, Rivo, is designed to log all issues arising from:

- audits;
- workplace inspections;
- complaints;
- risk assessment/hazard identifications;
- debriefs;
- change notifications; or
- casual observations.

Veolia continually audits, reviews and upgrades company systems, management plans and supporting documentation to maintain business and best practice standards, as well as comply with relevant legislation. To achieve this, Veolia maintains a program for independent third-party certification/accreditation to the following standards:

Veolia has ISO 9001, AS 4801 and ISO14001 accreditation across all sites in the country. The system is consistent with the requirements of a number of relevant standards listed in **Table 2.3 below.**

Table 2.3 Certification

Description	Certificate Number
ISO 9001 Quality Management System	10266327
AS/NZS 4801 Work Health and Safety Management System	10266324
ISO14001 Environmental Management System	10266325

2.3. Environmental Policy

Veolia has developed a variety of company-wide policies in support of the sound management of its facilities. Veolia employees are required to commit to the implementation of these policies.

Veolia's Environment Policy (POL-10) supports our commitment to the minimisation of emissions to land, air and water and the wise use of natural resources.

2.4. Operational Efficiency

Veolia is committed to the protection of our community and the environment through efficiency, research and innovation. The feasibility of implementing cost-effective energy conservation measures have been investigated at the CTT to minimise greenhouse gas (GHG) emissions. These include:

- Assessing and utilising efficient electricity devices such as:
    - **Variable frequency drive motor controls on the waste compactors:** the variable frequency drive system drives the compaction system delivering only the necessary hydraulic pressure to achieve the specified putrescible waste bale density.
    - **Light sensors for external lighting:** where practical**,** essential external lighting have been fitted with a light sensor, so that they only turn on as the sun sets and turn off as the sun rises.
- As lighting is being replaced, energy efficient lighting is installed to meet the product and performance specifications under best practice industry rating schemes

3. Facility Overview

The Clyde Terminal is located within a portion of the Clyde Rail Yard, at 322 (Lot 201 of DP 10076683) Parramatta Road, within the industrial and rail precinct south of Parramatta Road, in the Cumberland Local Government Area. To the north, the site is bound by Duck Creek and Parramatta Road and adjoined by commercial and industrial uses. The site is bound to the south by the Western railway line and other industrial uses are located to the southern side of the railway. The site layout and location plan is provided in **Appendix A**.

Pacific National (PN), owns the site and Transport for NSW owns the access way to the site, to which PN have a right of carriageway, allowing them access to their land which includes the site of the CTT.

Veolia operates the road/rail Terminal and has a long-term agreement with PN, which incorporates the leasing of land for the CTT.

3.1. Site Setting

Detailed below is a description of the site. Additional information can be found in the supplementary environmental management plans appended to this report, the original EIS (Maunsell McIntyre, 2001a) and SEIS (Maunsell (2001b), as well as the 2017 Environment Impact Statement (EIS) (SG Haddad Advisory) for the CTT for DA No. 205-08-01 MOD 5. A Traffic Impact Assessment (Colston Budd Rogers & Kafes, 2017), a Noise Impact Assessment (Wilkinson Murray, 2017) and an Air Quality Impact Assessment (Wilkinson Murray, 2017) have also been completed as part of subsequent modifications.

3.1.1. Soils

The site is located on the Cumberland Plain. The topography of the site and surrounds is generally flat to the Parramatta River, which is approximately 2.5 km to the north.

A significant proportion of the material identified on the site is imported fill; however the site is fully sealed through the presence of the transfer building and surrounding hardstand area.

3.1.2. Flooding and Drainage

The previous drainage system, which had been buried, ran along the access road from Parramatta Road, and consisted of underground pits with grated openings along the road and 600 mm pipes discharging to Duck River. The flat terrain of the site, coupled with this drainage system resulted in the accumulation of ponded water during wet weather.

The stormwater system consists of an oil/silt separator and two on-site detention ponds, Pond 1 and Pond 2 which are discharged to Duck River via an existing culvert and headwall which were installed at the CTT during the original construction. Pond 1 was modified in 2017 to function as a First Flush system.

Based on flood profiles undertaken for the EIS, and recent Cumberland Council flood maps, the bank of Duck River is not overtopped for the 20, 50 or 100 year storm events and accordingly, the risk of flooding the CTT from Duck River is low.

Further details of stormwater management are contained in the Stormwater Management Plan (SMP) provided in **Appendix C5**.

3.1.3. Flora and Fauna

The site of the Clyde Rail Yard, including the CTT consists of bitumen.

The flora and fauna of the adjacent Duck River corridor have been investigated. The flora along the lower parts of the channel were identified as mangroves with extensive areas of weed infestation. The mangroves provide habitat for a range of birds, arboreal mammals, some microchiropteran bats and insects, however no threatened species or their habitat was detected within the study area.

3.1.4. Non-Indigenous Heritage

The Clyde Rail Yard was constructed in 1892 and was listed as a heritage item. The CTT is located in the Second Up Marshalling Yard, considered to have been constructed in 1909. The railway sidings in this yard have also been assessed to be of regional heritage significance.

3.2. Facility Description

The CTT consists of a waste transfer building, and associated road and rail infrastructure, including:

- An access road for waste trucks entering and exiting the facility from Parramatta Road.
- Incoming and outgoing weighbridges to check the waste type and weight of the waste being delivered to the facility.
- An enclosed building for the unloading and handling of waste, with environmental controls such as dust suppression and odour control systems.
- A hardstand area for temporary storage and maneuvering of full and empty sealed shipping containers prior to loading on to trains.
- Rail sidings for the loading of fully sealed containers onto trains for rail transport to Woodlawn.

A Site Layout Plan is provided in **Appendix A**.

3.2.1. Transfer Building

The size of the tipping floor was determined by the average weekday loadings, taking into account additional spatial requirements for an emergency or breakdown situation and is capable of storing a full day's waste. The Waste Management Plan (WMP) provided in **Appendix C1** details the waste acceptance and processing procedures employed at the CTT.

3.2.2. Office and Amenities

A relocatable building is positioned along the west side of the transfer building to house administration offices and staff amenities.

3.2.3. Entrance/Exit Road

The entrance to the site is directly off Parramatta Road via a slip lane. All traffic is restricted to a left in and left out turn at Parramatta Road with use of the existing access roads once within the Clyde Rail Yard. The Traffic Management Plan (TMP) provided in **Appendix C3** outlines the traffic management procedures employed at the site.
All roads within the CTT are sealed.

3.2.4. Weighbridge Office and Weighbridge

A weighbridge office and dual weighbridge is located adjacent to Track 20 approximately 250 m from Parramatta Road and approximately 45 m from Duck River. All vehicles entering and exiting the terminal building are weighed.

3.2.5. Stormwater Oil/Silt Separator and Retention Pond

A stormwater oil/silt separator and retention pond ensures that stormwater generated from the CTT development is collected, treated and discharged in a controlled manner into Duck River through Pond 1 and Pond 2 via a culvert and headwall. Pond 1 functions as a First Flush System

3.2.6. Car Parking Area

A total of 15 staff and visitor car parking spaces are provided within the site. This car parking accommodates up to six workers on each shift, two visitors and one disabled space.

3.2.7. Containers and Container Hardstand

The CTT is entirely covered in hardstand, including the container loading and storage area. This hardstand area is used for temporary storage and maneuvering of full and empty sealed shipping containers prior to loading onto trains. Containers are sealed and fitted with carbon filters which are regularly replaced.

3.2.8. Rail Sidings

The facility utilises two rail sidings located on the Eastern side of the site, which are each approximately 280 metres long and have a combined capacity to load up to 37 wagons. There is a bitumen hardstand area in between the rail sidings to allow manoeuvring of container handlers and the storage of the containers. The main rail corridor and the site are protected by boundary fencing.

3.3. Operations Overview

The CTT's operational hours are 24 hours per day, 7 days per week. The CTT is licensed under EPL No 11763 to accept no more than:

- 600,000 TPA of General Solid Waste (Putrescible)
- The EPL permits waste processing (non thermal treatment) and waste storage activities at the facility.

- The operation of the CTT includes receipt of solid waste from municipal, commercial and industrial sources with the Sydney Metropolitan Area (SMA) as follows:
    - Waste is accepted, weighed and unloaded on the tipping floor of the transfer terminal building, where it is screened for conforming waste in accordance with the EPL.
    - The waste is then pushed by front-end loaders into compactors via a chute to form a ‘slug’ of compacted waste and into a modified 40-foot shipping container with the use of a hydraulic ram.
    - Filled shipping containers are loaded daily onto train wagons for transport via rail to the Crisps Creek Intermodal Facility (IMF), approximately 250 kilometres southwest of Sydney, in the Southern Tablelands.

Other activities related to, but not operated as part of the CTT included:

- Unloading of containers at the IMF and transporting them by road on quad axle trailers to the Woodlawn Eco Precinct (the Eco Precinct) approximately 8 km from the township of Tarago for either disposal in the landfill or for processing as compost; and
- Loading of empty containers back onto the train to return to the CTT for reloading.

3.3.1. Related Operations

Veolia owns and operates the Eco Precinct, which consists of two properties on approximately 6,000 hectares (ha) of land, namely Woodlawn and Pylara. The site includes the area of the Special (Crown & Private Lands) Lease 20 (SML 20), encompassing the Woodlawn Mine, a former lead, copper and zinc mine which ceased mining operations in 1998.

3.3.1.1. Woodlawn Bioreactor

The first stage of the Eco Precinct developed by Veolia was the Woodlawn Bioreactor (the Bioreactor), which commenced operations in September 2004 and is located in the void of the former Woodlawn Mine.

The Bioreactor has considerable capacity to receive putrescible waste generated from both Sydney and surrounding areas of regional NSW. Veolia lodged a modification application to remove the arbitrary annual waste input limits into the Bioreactor in response to the Wright Corporate Strategies’ Public Review – Landfill Capacity and Demand (the Wright Review, 2009). The Wright Review was an independent review commissioned by the Minister for Planning to examine critical issues such as the continuing need for putrescible waste landfill capacity, regional disposal capacity and demand.

On 16 March 2012, the Department of Planning and Environment (DPIE) granted approval for the Bioreactor to increase its annual maximum input rate from 500,000 TPA to 1,130,000 TPA, referred to herein as the expanded operations. In order to facilitate the expansion of the Eco Project through the increased waste receipt capability of the Bioreactor, Veolia constructed the additional waste transfer station and associated rail infrastructure at the Banksmeadow Transfer Station.

Waste is deposited in the Bioreactor and with the use of optimal moisture and temperature conditions, achieves enhanced degradation to produce landfill gas and is collected through a vast network of infrastructure within the void. This gas is transferred to the Woodlawn Bioenergy Power Station, where methane is extracted from the landfill gas for conversion and supply as electricity into the energy grid.

3.3.1.2. Crisps Creek Intermodal Facility

The IMF, which forms an integral part of the logistical operations of the Eco Precinct, is located 8km from the Bioreactor in the township of Tarago, adjacent to the Goulburn-Bombala Railway line. Waste containers

transported from the Sydney region via rail are unloaded and transferred onto road trailers at the IMF for transport to the Bioreactor. The IMF was approved to accept 1,180,000 TPA from Sydney when the Bioreactor was granted expanded operations.

3.3.1.3. Woodlawn Mechanical Biological Treatment Facility

The Woodlawn Mechanical Biological Treatment (MBT) Facility (approved in 2007) is located on the Eco Precinct Site. The MBT is approved to receive up to 280,000 TPA, 240,000 of which is mixed waste and 40,000 TPA of garden waste from within the Sydney Metropolitan Area. Containerised waste is loaded onto rail wagons from Sydney for transportation to the Woodlawn Eco Precinct.

3.3.1.4. Banksmeadow Transfer Terminal

A similar facility to the CTT is operated by Veolia at the Banksmeadow Transfer Terminal in Port Botany. This facility is licenced to receive up to 500,000 TPA of putrescible waste from within the SMA, of which 400,000 TPA is putrescible material and 100,000 TPA is non-putrescible material. This facility has been operational since 2016.

3.4. Operational Environmental Impacts

The following key environmental parameters were considered to be potentially impacted by the operation of the CTT:

- **Traffic, transport and access:** Impact of operations on traffic on the surrounding road network and traffic from Parramatta Road related to CTT and local development proposals.
- **Rail access:** Details of connection and access requirements to the Botany Goods line.
- **Noise:** Noise impacts of the CTT on residential and adjacent industrial receivers. Calculated noise levels are predicted to comply with the EPA's intrusiveness and amenity criteria at the closest residential, commercial and industrial premises.
- **Air quality and odour:** Dust and odour impacts on surrounding area and measures to mitigate including sealed containers and good housekeeping.
- **Stormwater and flooding**: Using the flood profiles generated by the *Duck River and Duck Creek Flood Study Review (WMA Water, 2012)* and the *Lower Parramatta River Floodplain Risk Management Study (SKM, 2005)*, for Parramatta City Council, the flood levels along Duck River within the vicinity of Clyde Rail Yard were compared with the recently surveyed bank levels to assess the flood heights during various storm events. Control of contaminated stormwater leaving the site and prevention from entering Duck River.
- **Contamination:** Assessment of site for any contaminated fill and measures to minimise any risk from the contaminated fill.
- **Hazards and risk:** Determine hazardous materials with existing structures and identification of hazardous substances to be used or transported to site.

The environmental risk assessment of the parameters above took into account of the following:

- The planning and legislative requirements affecting the CTT;
- The environmental context of the CTT area and the region;
- The outcomes of the community and stakeholder consultation;
- A review of previous investigations undertaken for the CTT site;
- Existing operational and management plans used by Veolia; and
- The findings of the specialist environmental studies undertaken for EA.

3.4.1. Environmental Risk Assessment

On the basis of the environmental parameters considered above and the operational activities at the CTT, the outcomes of a number of environmental assessments undertaken have provided the following preliminary risk ranking i.e. without the implementation of suitable controls as per the **Table 3.1** below.

Table 3.1 Potential Environmental Impacts

Issue	Potential Impacts	Comment	Preliminary Risk Ranking	Key Issue? (Y/N)
Soils and Contamination	Site contamination and risk of human and environmental health risks from exposure.	A significant proportion of the material identified on the CTT is imported. The fill material may be contaminated. To minimise any risk from the contaminated fill the site is sealed with hardstand.	Moderate	Y - Addressed in the Site Contamination Management Plan
	Disturbance to soils and groundwater causing environmental harm	CTT is sealed with a hardstand to prevent any soil or groundwater disturbance. Should any excavation works be required at the facility, which may encounter contaminated soil, the Construction Site Contamination Management Plan will be triggered as per Condition 37.	Moderate	
Hydrology and Flooding	Alterations to hydrology on-site and discharge levels from Site, resulting in increased flood levels downstream	The CTT increased the impervious surfaces on site and consequently an increase in the stormwater runoff generated at the site. This has the potential to cause flooding downstream of the site.	Low	N - Site is not likely to flood; Supplementary management plan not required
	Release of leachate from putrescible waste to stormwater causing pollution of surface water.	A stormwater system, comprising of an oil/silt separator and retention basin discharging to Duck River via an existing culvert and headwall, is installed at the CTT.	Moderate	Y - Addressed in the Stormwater Management Plan
	Flood impacts on-site from Duck River.	Based on flood profiles undertaken for the EIS, the bank of Duck River is not overtopped for 20, 50 or 100 year storm events.	Low	N - Site is not likely to flood; Supplementary management plan not required

Traffic and access	Increased traffic volumes and frequency, including heavy vehicles, placing pressure on intersection and road capacities within the vicinity of the Site	The facility is open to receive waste 24 hours a day, 7 days a week. Increase in annual waste input would mean an increase in traffic associated with the Clyde Terminal. This equates to approximately 50 additional deliveries (100 movements) per day.	Low	Y - Addressed in the Traffic Management Plan
	Operation of rail link not accommodated within ARTC's network.	Train path availability within the ARTC rail network is needed to accommodate the CTT operations. Design or operation of the proposal is not consistent with ARTC operating standards.	High	
Waste Management	Disruption to operations	Unplanned disruption to terminal operations resulting in large quantities of waste being stored on site.	Moderate	Y - Addressed in the Waste Management Plan
	Release of leachate to stormwater	Failure to separate leachate generated on the site from stormwater, resulting in environmental harm.	High	
	Receipt of non-conforming wastes at the site	Waste which the EPL for the facility does not permit to be handled at the site brought to the site.	Low	
Noise and Vibration	Noise impacts on adjacent receivers from site operations.	Operational noise and vibration in relation to loading, unloading and dropping of containers, as well as from reversing vehicles and deposition of waste on the transfer terminal floor. Based on noise monitoring results and modelling for the CTT, noise levels comply with the DPIE 'intrusiveness' and 'amenity' criteria at the closest residential, commercial and industrial premises in accordance with the Noise Policy for Industry (EPA, 2017). Further information is detailed in the NMP provided in **Appendix C8**. To ensure compliance with the operational acoustic criteria, a noise barrier has been constructed on the south-western boundary of the CTT.	Low-Moderate	Y - Addressed in the Noise Management Plan
	Noise impacts on adjacent receivers from trucks and trains accessing the site.	Annual truck noise monitoring rounds are conducted at CTT. All truck noise measurements have been within the noise criteria of ADR 28/01 and hence do not exceed the trigger limits.	Low-Moderate	

Air Quality	Odour emissions from putrescible waste	Modification works to the CTT's existing odour control system, to improve performance and mitigate odours to below nuisance levels for all operating and meteorological conditions were undertaken in November 2007 and completed in February 2008. The modified odour control system comprises of a central 21 metre high vent stack and associated support structures, two 75 kilowatt extraction fans and a plenum to house the system on the mezzanine level of the CTT. Modelling of the design parameters of the odour control system, following its commissioning, indicated that the system satisfies the criteria required in the COCs, as well as EPA's less than 2 odour units at the nearest sensitive receiver. Additional details on the odour control system modification and management procedures are contained in the AQMP.	Low	Y - Addressed in the Air Quality Management Plan
	Air pollutants emitted from vehicles and trains accessing the site and machinery operating on-site.	The operation of the CTT results in an insignificant increase in dust concentrations at the boundary of the site. Good management practices and attention to dust suppression within the terminal building for unusually dusty loads further reduces dust levels and ensures compliance with EPA requirements. Additional details on the dust minimisation procedures are contained in the appended in the AQMP.	Moderate	
Greenhouse Gas Assessment	Release of greenhouse gas emissions	GHG emissions will be released as a result of the operation of the CTT, including waste management operations (handling and transportation of waste).	Moderate	N - Net benefit realised (see below) Not Applicable
	Overall reduction in GHG emissions	The proposal would result in the transfer of waste to the Woodlawn Eco-Project site that comprises the MBT and Bioreactor, which have both been designed to minimise GHG emissions from decomposition of waste.	Low (net benefit)	

Biodiversity	Reduced biodiversity as a result of the operations	The site of the Clyde Rail Yard, including the CTT was entirely cleared of native vegetation, filled and covered with bitumen prior to the construction of the CTT. The flora and fauna of the adjacent Duck River corridor has been previously investigated. The flora along the river corridor was identified as mangroves with extensive areas of weed infestation. The mangroves provide habitat for a range of birds, arboreal mammals, some microchiropteran bats and insects, however no threatened species or their habitat was detected within the study area.	Low	N - Not likely to impact, therefore supplementary management plan not required
Indigenous Heritage	Negative impact on Indigenous heritage within the area.	A search of the EPBC Protected Matters search tool and the AHIMS NSW register found no items of Indigenous Significance within a 5 km radius of the site.	Low	N - Not detected, therefore supplementary management plan not required
Non-Indigenous Heritage	Negative impact on non-indigenous heritage within the area.	The Clyde Rail Yard was constructed in 1892 and is listed as a heritage item in Schedule 2 of the Auburn Council Local Environmental Plan. The CTT is located in the Second Up Yard, considered to have been constructed in 1909. The railway sidings have been assessed to be of regional heritage significance. The operation of the CTT has not had any adverse impact on heritage significance of the area. Impacts from the temporary construction works associated with the modification of the odour control system within the terminal building are also not envisaged.	Low	N - not likely to impact, therefore supplementary management plans not required
Socio-economic	Potential for negative social impacts in relation to increased traffic, noise, and air pollution (including odour), as well as decreased visual amenity	The site is located within an Industrial precinct within a low population density area. Nearest residential area located approximately 250 m to the north-east of the site.	Low	N - Not likely to impact, therefore supplementary management plan not required
	Changes to local	The operation is expected to create up	Low (net	

	demographic and local economic impacts	to 25 new jobs, providing economic benefits for the area.	benefit)	
	Regional economic impacts	The operation will provide significant regional benefits, aiding in reduced waste transferred to landfill and increased industrial resource reuse and provision of a cost-effective waste management alternative, increasing competition and reducing costs, indirectly benefiting SSROC and thereby their communities.	Low (net benefit)	
Visual Impact	Decreased amenity of the area.	The visual impact of the CTT is considered low compared to other buildings in the vicinity of the site. Landscaping works have been used to enhance the appearance of the site, including the planting of local native species along the site's entrance road and around the office area.	Low	N - Not likely to impact, therefore supplementary management plan not required
Hazard and Risk	Occurrence of hazards or risks onsite	Potential risks associated with the operation include; chemical or pollutant spills, hazardous or dangerous goods, fire/explosion within terminal building, receipt of hot loads and medical emergencies.	High	Y - Addressed in this OEMP and the Emergency Response Plan
Cumulative Impacts	Cumulative impacts associated with increased traffic volumes from surrounding developments.	The site is located on a main road, often heavily impacted by traffic. Trucks accessing the site would add to existing impacts of high traffic volumes and its associated consequences.	Moderate	Y - Addressed in the Traffic Management Plan
	Flood risk from increased stormwater runoff associated with increased impervious areas associated with development.	The site is located in a highly disturbed catchment with large areas of impervious surfaces. Further impervious surfaces will continue to exacerbate catchment runoff problems.	Moderate	Addressed in the Stormwater Management Plan

3.4.2. Key Environmental Issues

The key environmental issues, identified via the risk assessment have been addressed in supplementary Environmental Management Plans (EMPs) appended to this OEMP (refer **Appendix C**). These management plans include a description of controls as identified mitigation and performance measures.

3.4.2.1. Site Contamination

The potential impacts associated with site contamination could be caused by disturbance to contaminated material on site which could potentially have adverse impacts on human health, surrounding ecology, air quality, and surface and ground water quality.

3.4.2.2. Water Quality

The potential water quality impacts associated with operations of the CTT would arise from:

- Accidental spills or leaks within the CTT site, which have the potential to result in contaminants being transported into the surrounding environment;
- Alterations to hydrology on-site, flood storage capacity and discharge levels from CTT could result in increased flood levels downstream.
- Potential failure or accidental release of leachate from the leachate storage tank or containers
- Release of leachate from putrescible waste to stormwater may cause pollution of surface water

3.4.2.3. Waste

The potential impacts associated with waste operations at the CTT would arise from:

- Handling large quantities of waste with potential to generate odour;
- Disruption to waste operations and waste storage on site;
- Release of leachate from putrescible waste to stormwater may cause pollution of surface water;
- Receipt of non conforming waste in contravene with its EPL.

3.4.2.4. Traffic

Issues for traffic management at the CTT include:

- High traffic volumes and frequency, including heavy vehicles, placing pressure on intersection and road capacities within the vicinity of the Site
- Reduction in road safety as a result of number of heavy vehicles operating on the road networks around the CTT
- Accidents occurring on-site as a result of light and heavy vehicles, trains, container handlers and machinery operating within close proximity
- Rail access to and from the site via external rail networks.

3.4.2.5. Air Quality

Dust and odour are the principal potential air quality impacts associated with operations of the CTT. These arise due to:

- Dust emissions: movement of plant, equipment and heavy vehicles around the CTT and handling of waste within the transfer terminal building.
- Odour emissions: putrescible waste handled at the facility on residential receivers.

3.4.2.6. Noise and Vibration

Noise and vibration impacts associated with operations of the CTT were determined to arise from operational activities on site, heavy vehicles accessing and tipping waste, and from rail operations.

3.4.2.7. Emergency Response Plan

To manage potential risks associated with the operation of the CTT, an Emergency Response Plan has been prepared to provide guidance whenever a major incident, emergency or crisis could lead to public health, safety

or environmental issues. Refer **Section 4.4.**

4. Implementation of the OEMP

4.1. Structure, Roles and Responsibility

Staffing of the CTT is as follows:

- Weighbridge Operators (day and night shifts);
- 1 x Leading Hand;
- 4 x Forklift/Compactor operators;
- 1 x Facility Manager

Additional staff involved with the operation of the CTT includes:

- Environmental Management Representative;
- Sydney Operations Manager;
- Plant Maintenance Supervisor;
- Monitoring Personnel;
- Environmental Coordinator;
- SHEQ Representative

A summary of the authorities and environmental responsibilities of key personnel for the operation of the CTT is provided below, followed by an organisational chart.

4.1.1. Facility Manager

- Approve and implement the OEMP;
- Report to senior management on the performance of the system and environmental issues/breaches etc;
- Allocate project resources to handle environmental issues;
- Take action to resolve major non-conformances;
- Ensure suppliers and subcontractors comply with requirements; and
- Ensure that site personnel receive appropriate environmental awareness training, in consultation with the EMR.

4.1.2. Environmental Management Representative

- Report to the Facility Manager on the performance of the system and improvement opportunities;
- Provide support to the site to ensure they are aware of their environmental obligations and enable them to meet their environmental commitments;
- Ensure that non-conformances are recorded and actioned; and
- Prepare the Annual Environmental Management Report.

4.1.3. Environmental Coordinator

- Review and update the OEMP and associated documentation;
- Ensure that environmental records and files are maintained;
- Provide support to the site to ensure they are aware of their environmental obligations
- and enable them to meet their environmental commitments; and
- Ensure that non-conformances are recorded and actioned;

4.1.4. Monitoring Personnel

- Undertake environmental monitoring requirements of the licence;
- Ensure environmental monitoring data accurately reported;
- Assisting with environmental performance reporting requirements;

4.1.5. Contractors

As part of vendor setup, contractors are directed to:

- Comply with legal and contractual requirements as instructed by Veolia.
- Comply with CTT management / supervisory directions.
- Participate in site induction and training as directed.
- Report hazards and incidents to CTT staff.

4.1.6. NSW Environmental Advisor

- Ensure that non-conformances and non-compliances are recorded and actioned
- Provide support to the site to ensure they are aware of their environmental obligations and enable them to meet their environmental commitments

4.1.7. All Personnel

- Comply with the relevant Acts, Regulations and Standards.
- Comply with Veolia Environment Policy, environmental management standards and procedures.
- Comply with and implement the requirements of this OEMP
- Promptly report to management on any non-conformances and/or breaches of the system.
- Undergo induction and training in environmental awareness as directed by management.

Figure 4.1 indicates the staffing and organisational structure for the operation of the CTT, which will be amended from time to time as required.

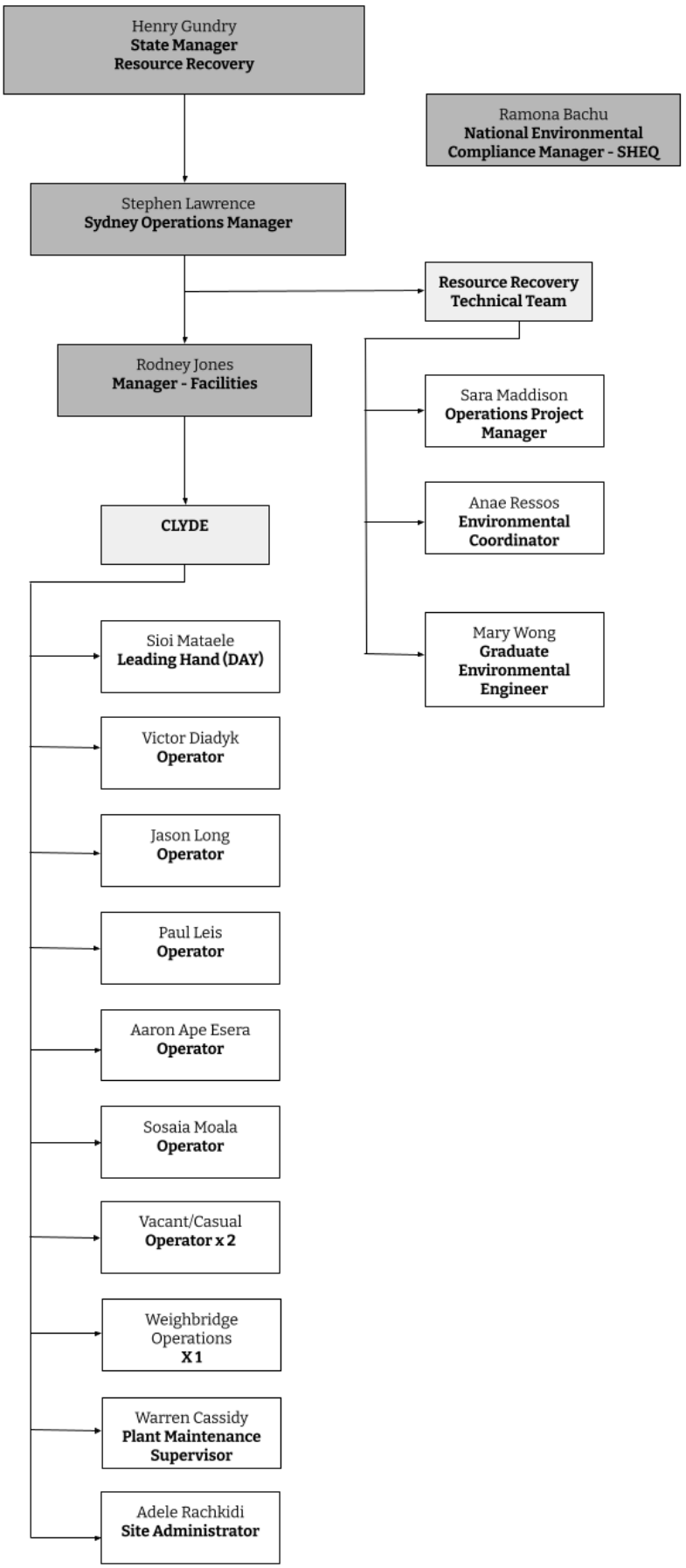

Figure 4.1 CTT Organisational Chart

4.2. Training

A training matrix has been developed for the CTT, based on Veolia's Training and Development Standard, which requires corporate/site specific inductions, competency based training requirements for operators, as well as administrative, risk and emergency response training.

An overview of the type of training undertaken at CTT is provided below:

4.2.1. General Induction

All employees receive a corporate induction which provides an awareness of Veolia's commitment to the environment and sustainability. Components of Veolia's general induction program are as follows:

- Veolia corporate induction via LMS online modules;
- Safety, health, environment and quality induction

As relevant, operational employees receive site specific inductions, including suitable environmental training, to ensure they are aware of their responsibilities and are competent to carry out their work as per the next section.

4.2.2. Site Training

Site specific inductions are a requirement for all site personnel, contractors and visitors.

4.2.2.1. Employees

In addition to the general induction, all employees receive site specific training covering the following:

- OEMP and related documents;
- Site environmental objectives and targets;
- Understanding individual authorities and responsibilities;
- Significant project aspects, impacts and controls;
- Potential consequences of departure from procedures;
- Emergency procedure and response; and
- Understanding the legal obligations.

All staff are to be reassessed twice within the first year to ensure they maintain the required level of training, including compliance with relevant procedures.

4.2.2.2. Contractors

In addition to vendor set up, contractors receive site specific training covering the following as well:

- Contractors are made aware of the environmental obligations for the CTT and the key aspects and impacts
- It is a requirement of Contractors to report hazards or incidents they become aware of on site
- CTT site personnel verify Contractor risk assessments to ensure appropriate controls are implemented
- A permit to work system operators to ensure any high risk work is appropriate controlled
- Emergency procedure and response and responsibility to report environmental incidents; and
- Significant project aspects, impacts and controls on the project they are working on

4.2.2.3. Drivers

A compulsory site induction has been established for the customers on how to induct their drivers accessing the site. The driver induction includes but is not limited to the following conditions of entry:

- Left turn entry and exit from Parramatta Road;
- All Waste Drivers reporting to weighbridge personnel;
- Use of Personal Protective Equipment (PPE's);
- Visitor restrictions;
- No smoking on site except in designated areas;
- Obeying traffic signs;
- On-Site machinery has right of way;
- Following instructions from site staff;
- Reporting to Hot Load zone upon arrival if carrying a Hot Load and contacting staff;
- Ensuring tailgate is clean and any loose material removed before exiting the waste shed;
- Reporting incidents, injuries and spills;
- Punitive action for non-compliance with conditions of entry;

Following this training program all drivers are required to undertake a questionnaire as proof of induction and to ensure competency.

4.3. Communications and Consultations

Veolia is committed to meaningful stakeholder engagement and has worked in collaboration with relevant government agencies and the local community in the Cumberland and Parramatta LGAs to resolve issues that result from operations at the CTT.

Internal communication methods include the following, as applicable:

- Monthly toolbox meetings;
- Annual risk management audit reports;
- Non-conformance reports
- Noticeboards;
- Employee induction and training, refer to **Section 4.2**.

External communication methods and their respective time frames include the following, as applicable:

- Annual regulatory reports
- Annual public notices and announcements
- Meetings and correspondence with appropriate regulatory authorities, as required
- Correspondence with adjoining landowners / neighbours, as required
- Prompt response to complaints

4.3.1. Government Bodies

The following government bodies will be consulted in relation to the operations of the CTT and the requirements of this OEMP:

- NSW Department of Planning, Industry and Environment;
- NSW Environment Protection Authority;
- Australian Rail Track Corporation (ARTC);
- Transport for NSW;
- Cumberland Council;

- Parramatta City Council; and
- NSW Office of Water.

4.3.2. Community Consultation

As a result of a decline in community interest, Condition 134 of the COCs was modified to allow for alternate measures of community engagement if a Community Consultative Committee (CCC) cannot be maintained. Alternate measures listed below have been proposed and approved by the DPIE:

- Publishing the community information phone line and email address on the Veolia's Corporate Website on the Clyde Transfer Terminal webpage (https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station) for all stakeholders to make enquiries, complaints or seek more information.
- Inviting community members to an Open Day at Clyde Transfer Terminal including all parties that put submissions to the Development Consent modification application submitted in 2017.
- Creation of an email distribution list to engage with interested stakeholders on a routine basis communicating updates on activities on site.
- Sending Clyde Transfer Terminal's Annual Environmental Management Reports (AEMR) to Cumberland Council.
- Other means of liaising with the community include local newsletters, leaflets, newspaper advertisements, and community notice boards as deemed appropriate.

At present, the primary methods of liaising with the community are local newsletters, leaflets, newspaper advertisements and community notice boards as deemed appropriate.

4.3.3. Information Availability

The following information about the CTT is available through to web links indicated:

- Dedicated Veolia webpage:
  - https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station
- Community telephone line:
  - CTT 24 hour feedback line: (02) 9841 2600
- Dedicated email address:
  - clyde.weighbridge@veolia.com
- Published Reports:
  https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station
- Published Monitoring Data:
  https://www.veolia.com/anz/about/about-veolia/operational-compliance/nsw-monitoring-reports

In accordance with the COCs, the following information is made available, and kept up to date, on the CTT webpage:

- approved strategies, environmental management plans or programs;
- a summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent;
- a complaints register, updated on a quarterly basis;
- copies of any annual reviews (over the last 5 years);
- any independent environmental audit and Veolia's response to the recommendations in any audit; and
- any other matter required by the DPIE

4.3.4. Complaints Handling Procedure

Records of all complaints are kept for at least four years after the complaint was made.

Receiving public comments from the impacted community is possible through the 24-hour operated weighbridge office telephone number listed above. The Facility Manager and/or EMR are notified of all public complaints. All public complaints received (either written or verbal) are documented in the online Complaints Register which contains the following information:

- the nature and extent of the complaint;
- the details of the person lodging the complaint;
- details of location, date, time and effects of the complaint;
- the action taken to address the complaint including follow up contact with the complainant.

The Register is kept updated to ensure any complaints are correctly recorded and addressed.

4.3.5. Complaints Management

An initial response is provided to the complainant by the next working day following the date of the complaint, where possible. The corrective action may involve supplementary monitoring to identify the source of the non-conformance, and/or may involve modification of operational techniques to avoid any recurrence or minimise its adverse effects.

The Facility Manager or EMR investigates and determines appropriate corrective/preventive actions to be taken to address all complaints. The complainant is informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken the reasons why are recorded. The Facility Manager or EMR will make available a report on complaints to the community and relevant government agencies upon request.

4.4. Incident and Emergency Response

A key objective of this OEMP is to identify potential risks, and to develop, and maintain measures to manage them. Notwithstanding this, Veolia recognises that unforeseen incidents can arise.

Veolia operates under an Emergency Response Plan whenever a major incident, emergency or crisis could lead to public health, safety or environmental issues.

Veolia’s approach to incident and emergency response management includes:

- Risk Analysis - The identification of hazards and risks that could impact the community, environmental and operational implications.
- Prevention – The planning and documentation of prevention and mitigation activities for all major hazards, and allocation of responsibility for their implementation.
- Preparedness – The development, implementation and review of specific incident management plans and processes to manage identified risks, the training of staff, and establishment of facilities to ensure the company can respond effectively to an incident.
- Response – The issue of warnings and establishment of processes for effective notification of incidents, and mobilisation of resources to combat the incident or threat.

- Recovery – The return to normal operations, management of debriefs, and implementation of lessons learnt from the response process.

The following priorities are adopted when combating an incident / crisis:

- Protection of human life and welfare;
- Protection of the environment; and
- Protection of Veolia's assets.

Potential threats to the environment or public health that may arise in relation to the operation of the CTT (as presented in **Section 3.4.2**) include:

- Fire;
- Explosion;
- Overflow / spillage;
- Structural damage;
- Power or other utility failure;
- Natural disaster;
- Surface water and groundwater contamination;
- Traffic accident; and
- Geotechnical instability

4.4.1. Emergency Response Management

The Emergency Response Plan - CTT (MAN-5569) (ERP) incorporates an Incident Response Management Plan and a Pollution Incident Response Management Plan (PIRMP), as required under the COCs and EPL respectively.

The ERP identifies and responds to potential incidents and emergencies at the CTT as summarised in the Incident Response Process Map in **Figure 4.2** below. It describes the general policy and approach that should be followed when dealing with an emergency or incident. It aims to:

- Address various types of emergencies, including fire, explosion, rock falls, traffic accidents and wind and structural damage
- Minimise the risk to all personnel in an emergency
- Control any incident to minimise damage to plant, equipment, property and the environment.

The ERP outlines:

- Facility description, site plans and maps
- Incident identification and notification process;
- Emergency contact details;
- Emergency response procedures; and
- Training requirements

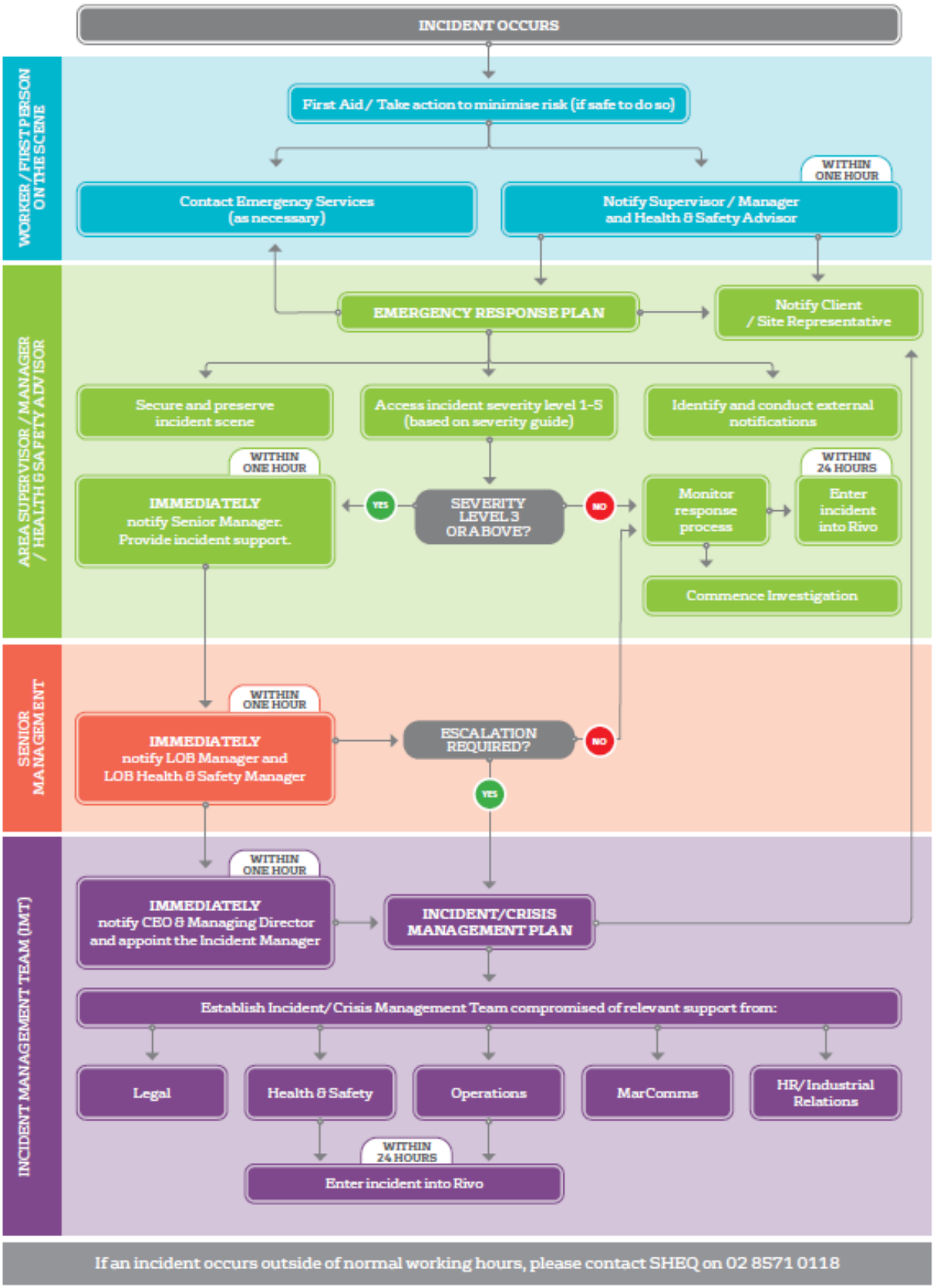

Figure 4.2 Incident Response Process Map

4.4.2. Incident Notification Requirements

4.4.2.1. Incident Reporting

Incident notification processes will reflect the extent of the event and the incident classification. Reporting will be in accordance with the Veolia Incident Management Procedure - PRO-317 as summarised in **Figure 4.2**. This procedure is used for the response, investigation and reporting of incidents that have affected or have the potential to affect the environment or health and safety of a worker, contractor, subcontractor or a visitor to Veolia.

Incidents are logged in Rivo and managed in the following sequence:

- Log incident;
- Investigate incident;
- Close incident;

If further action is required, an issue can be raised or logged in Rivo. Issues raised are assigned for action to specific Veolia personnel. Corrective action can then be implemented to minimise the risk of recurrence of the incident.

Any notifiable environmental incidents or potential incidents associated with the CTT, with actual or potential significant impacts on people or the biophysical environment, will be notified as soon as practicable to the EPA, DPIE, Cumberland Council and other relevant agencies by the nominated SHEQ Representative. This notification will be followed by a written report within 7 days of the incident.

A **notifiable environmental incident** is a pollution incident where there is a risk of causing or threatening material harm to the environment. A pollution incident includes a leak, spill or escape of a substance or circumstances where this is likely to occur. Material harm includes onsite and offsite actual or potential harm to:

- The health or safety of humans;
- The environment; or
- Property damage resulting in significant costs to remediate

If a notifiable environmental incident occurs, Veolia staff will immediately notify one or more of the following personnel (refer **Section 4.4.2.2 Emergency Contacts**):

- The Facilities Manager - Clyde and Greenacre
- NSW Environmental Advisor

That person/s will then decide whether to notify DPIE, EPA or both. Where these regulators are notified, other regulatory authorities that require notification under the PIRMP include:

- local councils (Cumberland or Parramatta City Councils) within which jurisdiction the incident has occurred;
- Ministry of Health;
- Fire + Rescue NSW; and
- Any other relevant authorities.

The EPA will also be notified of any incident that represents a threat to the environment. This will be done via the EPA's 24-hour Pollution Line (131 555) and a written notice will follow within 7 days, where instructed by an officer. Such incidents may include, but are not limited to:

- Fires at the CTT, either surface or subsurface;
- Identification of any failure of an environmental protection system; and,
- Any other incident or observation that could potentially pose an immediate environmental hazard outside normal operating conditions.

4.4.2.2. Emergency Contacts

The following are the internal emergency contacts for the CTT. For a comprehensive list, including regulatory authorities, local community and emergency services, refer to the ERP.

Table 4.1 Emergency Contacts

Position	Name	Phone Number
State Manager Resource Recovery	Henry Gundry	0400 233 592
Sydney Operations Manager	Steve Lawrence	0419 610 938
Environmental Management Representative (EMR)	Sara Maddison	0439 820 254
Environmental Compliance Advisor (Acting)	Ramona Bachu	0407 668 199
NSW Health & Safety Manager - Waste	Barbara Newby	0448 467 964
Clyde 24hr Feedback Line	Clyde Weighbridge	9841 2600

5. Monitoring and Review of the OEMP

5.1. Monitoring and Reporting

5.1.1. Inspections, Testing and Monitoring

Monitoring at the CTT is conducted in accordance with the Environmental Monitoring Program - CTT (MAN-14012) which is prepared to satisfy the reporting requirements of the EPL and COCs. The Environmental Monitoring Program outlines site specific environmental issues, monitoring procedures and action plans for non compliances. The annual environmental monitoring schedule is compiled to detail the monitoring parameters required to be monitored at the CTT and is included within the Environmental Monitoring Program.

Regular environmental inspections are undertaken by the CTT personnel to ensure that environmental controls have been implemented, meet specification, and are being maintained in accordance with the NSW Inspecting and Testing Program as summarised in **Table 5.1** below.

Table 5.1 CTT Environmental Inspection and Testing Schedule

Item	Type of Inspection / Testing	Frequency of Inspection	Responsibility
Weighbridge	Certification and/or calibration	Annual	Plant Maintenance Supervisor
Fire Pump Fire Extinguisher Annual Fire Statement	Inspection	Monthly Six monthly Annual	Facility Manager / Infinity Fire Protection
Weather station - download of meteorological parameters	Inspection	Weekly	Resource Recovery Technical Team
Weather station - calibration and maintenance	Calibration	Quarterly	Hydrometric Services
	Obtain Records	Quarterly	Monitoring Personnel
Odour Fan servicing	Test / service	Monthly	Fan servicing contractors/ Facility Manager
Odour audits	Testing	Six Monthly	The Odour Unit
	Obtain Records	Six Monthly	Monitoring Personnel
Traffic spot monitoring as per Traffic Management Plan	Visual Inspection	Ongoing	Facility Manager, Weighbridge operator
Waste volume monitoring	Inspection	Daily	Facility Manager, Leading Hands
Site inspection and housekeeping checks	Inspection	Weekly	Facility Manager or Nominated person
Containers	Certification	On a routine basis, subject to the Container Maintenance Program	Facility Manager
	Inspections	Daily	Operators

	Maintenance	Yearly	BTT Facility Manager
ISO Tanker (leachate)	Certification / Hydrostatic test	Every 5 years	Facility Manager
Pest Control Service	Inspection / service	Quarterly	Facility Manager / Pest Control Personnel
Noise	Inspection	As required	Facility Manager, Leading Hands

In addition, some aspects of environmental monitoring and checks are included in the routine operator duties, as per the site specific Inspection and Testing Register - TEM-5566. For compliance related environmental monitoring, refer to **Section 5.3**. Outcomes of the monitoring are recorded in appropriate forms/checklists.

At completion of each inspection, any corrective actions required are to be recorded in Rivo and managed in a timely manner summarised in **Table 5.2** below:

Table 5.2 Corrective Action Reporting Timeframe Requirements

Priority	Action	Timeframe
Low	May not require immediate action. Monitor situation and schedule control action	Action typically required within 15 to 29 days
Medium	Control actions as soon as possible	Action typically required within 7 to 14 days
High	Significant and immediate control	Action typically required within 1-7 days

Compliance with all environmental regulatory criteria is a priority for Veolia and its staff. Specific compliance obligations are identified in the supplementary EMPs appended to this OEMP (refer **Appendix C**).

Environmental non-compliances will be managed in accordance with CTT's Environmental Monitoring Exceedance/ Non-Compliance Work Instruction (WIS-14573-1) or on a case by case basis depending on the severity of the incident as described in **Table 5.3** below:

Table 5.3 Environmental Non-Compliance Investigation Procedure

Incident Classification	Investigation Team or Person	If the incident involves an injury
1. Insignificant 2. Minor 3. Moderate	A suitable competent person from the organisational unit or functional area where the incident occurred.	An Injury/ Occupational Illness Report form must also be completed by the relevant Line Manager using the short investigation form completed in Rivo

4. Major 5. Catastrophic (Crisis)	Appropriately independent qualified person appointee as a single Lead Investigator	Long investigation form to be completed in Rivo for any injuries/occupational illness

5.1.2. Compliance Reporting

In the event that any monitoring results demonstrate an exceedance of a limit specified in the COCs, Veolia will submit a report to DPIE and Cumberland Council within 30 days of the monitoring exceedance, stating:

a) The reason for the exceedance;
b) Action taken to ensure the limit is not exceeded in the future;
c) Proposed action to ensure the limit is not exceeded in the future;
d) Timetable for implementing the proposed action in c); and
e) Results of additional monitoring which has been conducted within 7 days of the action taken in b) and c) above, to demonstrate compliance with the limit.

Compliance reporting is required to produce systematic, comprehensive and informative reports on the environmental performance of CTT operations and in line with relevant legislative requirements. The reports required are summarised in **Table 5.4**. Reporting parameters, such as frequency of reporting and items to be included in the report, are also provided in this table.

Reporting requirements that relate to specific environmental aspects are included in the relevant supplementary EMPs (**Appendix C**).

Table 5.4 CTT Reporting Requirements

Type of Report	Frequency	Distribution	Report Inclusions
Independent Environmental Audit (IEA)	Yearly	DPIE and company website for the public	Assessment of environmental performance of facility
Annual Return	Yearly	EPA	Annual Return Form;
AEMR	Yearly	DPIE, EPA, CTT registered emailing list, and company website for the public (once	An Annual Environmental Management Report (AEMR) includes annual monitoring undertaken, summary of complaints, compliance with EPL conditions and overall environmental performance of the CTT

		approved by DPIE)	
Truck Noise Monitoring	Yearly	Company website for the public	The Truck Noise Monitoring reports heavy vehicle noise monitoring at CTT. This report is attached to the AEMR.
Odour Audits	Biannual	Company website for the public	The 6-monthly odour audit program assesses and documents fugitive odour emissions from the transfer building, ground level odour impacts, general housekeeping, complaints handling, meteorological monitoring, and actions on past odour audit recommendations. Reports are attached to the AEMR.

5.1.3. Environment Audits

Both internal and external environmental audits are undertaken on a routine basis to confirm that the CTT meets its compliance objectives, as well as to support continuous improvement in facility operations.

The audits assess:

- Compliance of the CTT's operations against relevant legal requirements;
- the effectiveness of the OEMP to meet Veolia policies and management system requirements, legislative and industry standards;
- whether the measures and/corrective actions carried out conform to the objectives of the OEMP;
- the adequacy of implemented controls to minimise high risk environmental issues or operational activities; and
- areas for continuous improvement.

Audit findings are reported to Veolia management for inclusion in management review processes or compliance reporting.

Audit reports are maintained in Rivo to enable non-conformances and opportunities for improvement, identified through internal and external audit processes at the CTT, to be recorded, reported and responded to.

5.1.4. Identification of Potential Adverse Environmental Impacts

The identification of any potential environmental incident on site would be facilitated through:

- Conducting of monitoring – Completed by the monitoring personnel in accordance with the CTT's Environmental Monitoring Program (MAN-14012);
- Review of monitoring results – monitoring results are reported to the EMR, and potential non-compliances are reported to the Facility Manager for corrective actions;
- Weekly Site Inspection Checklist – a formal walk-through of the site against set parameters allows for the identification of actual or potential environmental risk. This checklist includes provision for the application of corrective measures once an event is identified and sign-off on the measures by the Facility Manager;
- Toolbox meetings – monthly meetings with site staff permit discussion in general site status, environmental/safety concerns and general information sharing; and
- Audits – The CTT is incorporated into the Veolia internal environmental auditing program, which assesses the site against compliance of the development, due diligence and best practice.

An ERP has been prepared for the CTT to identify potential environmental and public health hazards that may occur as a result of the CTT's operations and is provided in **Appendix C7**. Refer to the ERP for further details regarding the investigation of any incident.

5.2. Management Review

Reviews of the CTT OEMP and the environmental performance of the CTT assess the continuing suitability, adequacy and effectiveness of the onsite environmental management measures implemented. The inputs to the management review process will include (but not be limited to):

- internal and external audits findings;
- incidents management and investigation of non-conformance events, incidents, near misses and management of all complaints received;
- implementation of all compliance and legislative changes as identified at a corporate level; and
- trend analysis on operational data.

The output of management review will include any decisions and actions related to:

- possible changes to the management plans, procedures, practices, objectives and targets associated with the environmental management of the CTT;
- improvement of the effectiveness of the Veolia management system and its processes; and
- resource needs.

Reviews are made periodically of all site specific key performance indicators pertaining to the environment and relevant business systems. This will include reviews, and if necessary, revision of the OEMP and sub-plans following any audit, major incident or series of complaints, or any modifications to the consent.

The following forums will form part of the management review process at the CTT, conducted periodically by the facility management, in conjunction with operators as required:

- Meetings;
- Toolbox talks;
- Hazard review groups;
- Serious incident reviews; and
- Miscellaneous environmental workshops

The following processes will be used for continual improvement:

- root cause identification and correction of incidents, complaints and issues of non-conformance

- root cause identification and prevention of potential incidents and nonconformances
- process/performance review, and
- enhancement of processes and generation of new initiatives.

The OEMP is designed to be a “living document” and along with all supporting plans will be constantly updated by the Environmental Coordinator if any aspects of the operation are altered that may affect the management plans. This may include, but not be limited to any changes to conditions by the various regulatory authorities. The Environmental Coordinator will also review the OEMP on an annual basis in conjunction with the EMR after the completion of the AEMR, particularly if any non-conformances are recorded.

The Revision History table is updated at these times and controlled versions of the OEMP are kept at the CTT and the State Office at Rosehill.

5.2.1. Management of Change Requirements

A change in activity or process at the CTT could potentially lead to additional hazards or risk and may have an influence on the surrounding environment. A Management of Change Procedure (PRO-253-2) is accessible on BMS and used on site to accommodate for any changes on site or site conditions, this includes managing changes to plant and equipment; infrastructure; operations; organisation and people.

5.3. Environmental Monitoring Program

Detailed sampling and analytical methods for the CTT are defined in relevant procedures, and work instructions stored on BMS. These have been prepared in line with relevant statutory requirements, and industry standards.

The implementation of monitoring requirements is the responsibility of the Resource Recovery Technical team.

All sampling strategies and protocols undertaken as part of the monitoring program will be conducted in line with industry best practice. Sampling will be performed by the Resource Recovery Operations Technical support team or contractors in accordance with the requirements set out in this OEMP and supporting EMPs. Sampling details such as the date and time in which a sample was taken, sampling locations and the details of employees/contractors carrying out the sampling will be recorded.

All technical sample analysis for compliance reporting will be performed in a NATA registered laboratory.

Where monitoring and measuring devices are used to provide evidence of conformity of product to determined requirements, these devices will be calibrated in accordance with the manufacturer’s recommendations. Records of calibration will be maintained and the calibration status of the device will be clearly communicated.

Depending on the equipment to be calibrated such as analysers and/or laboratory equipment, the calibration process will be scheduled and performed using a variety of methods as per various work instructions or supplier manuals.

If the results of a calibration are not satisfactory (if the required accuracy is not reached) or if an item of testing equipment is out of service, the equipment shall be removed from use and marked out of calibration / for repairs.

The environmental monitoring regime includes the sampling criteria, locations, parameters and frequency as identified in each of the relevant Supplementary Environmental Management Plans (refer to **Appendix C**) and summarised in the Environmental Monitoring Program - CTT (MAN-14012). The results of any monitoring required under regulatory conditions will be published on the Veolia webpage as provided in **Section 4.3.3** and will be kept for a period of four years.

References

Document Name
Environ (2006). *Statement of Environmental Effects - Modification to the Terminal Building Forced Ventilation System - Cyde Waste Transfer Station*, Environ Australia Pty Ltd. October 2006.
Maunsell McIntyer (2001a). *Clyde Transfer Terminal Environmental Impact Statement,* Maunsell McIntyer Pty Ltd. August 2001.
Maunsell (2001b). *Clyde Transfer Terminal Supplementary Environmental Impact Statement,* Maunsell Australia Pty Ltd. December 2001.
NSW EPA (2014). *Waste Classification Guidelines Part 1: Classifying Waste*, NSW Environment Protection Authority. November 2014.
NSW EPA (2017). *Noise Policy for Industry (2017)*, NSW Environmental Protection Agency. October 2017.

Appendix A - Site Layout Plan

Appendix B - Regulatory Documents

Appendix C - Supplementary Environmental Management Plans

Refer to Attachments

Appendix C1 - Waste Management Plan

Appendix C2 - Air Quality Management Plan

Appendix C3 - Traffic Management Plan

Appendix C4 - Vermin and Pest Control Plan

Appendix C5 - Stormwater Management Plan

Appendix C6 - Site Contamination Management Plan

Appendix C7 - Emergency Response Plan

Appendix C8 - Noise Management Plan

Appendix D - Consent Conditions Compliance Report