

VANZ Plan

Waste Management Plan - CTT

MAN-14632-1 Issue Date: 30/07/2021

PURPOSE	This Waste Management Plan (WMP) has been prepared to manage waste received at the CTT, in accordance with the requirements of the Conditions of Development Consent (COCs) and EPL issued for the Clyde Transfer Terminal (CTT).		
TOKE COL	The WMP details strategies to implement control strategies and mechanisms for the effective management of waste, and details management strategies for the lawful disposal and/or recovery of waste accepted via the facility in its operational phase.		

Scope	This WMP has been prepared to provide the management measures implemented to minimise potential waste related adverse impacts on the environment during the operation stage of the CTT.
Review Frequency	Yearly

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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

Definitions/Abbreviations

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

Term	Definition			
AQMP	Air Quality Management Plan			
BMS	Business Management System			
СТТ	Clyde Transfer Terminal			
coc	Conditions of Development Consent			
DA	Development Application			
DPIE	Department of Planning, Industry and Environment			
EIS	Environmental Impact Statement			
EMR	Environmental Management Representative			
EP&A	Environmental Planning and Assessment (Act and Regulations)			
EPA	Environment Protection Authority			
EPL	Environment Protection Licence			
ERP	Emergency Response Plan			
ОЕМР	Operational Environmental Management Plan			
PIRMP	Pollution Incident Response Management Plan			
POEO	Protection of the Environment Operations Act 1997			
PWS	Paperless Weighbridge System			
RMS	Roads and Maritime Services			
SMP	Stormwater Management Plan			
TPA	Tonnes per annum			
Veolia	Veolia Australia and New Zealand			
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, and forms part of Lot 201 of DP10076683 in the Cumberland Local Government Area. Refer to Site Layout Plan in **Appendix A** of the Operational Environmental Management Plan (OEMP).

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). Conditions (COC) of Development Consent (Consent) were issued to stipulate regulatory requirements for the operation of the CTT.

There have been a number of modifications since to COCs 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 review of this Waste Management Plan (WMP) has been triggered by modification application (DA No. 205-08-01 MOD 5) to increase waste acceptance to 600,000 TPA.

Waste received at the CTT from within the Sydney Region 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.

In addition, Environment Protection Licence (EPL) 11763 has been 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 WMP is to provide waste management procedures to form part of the CTT Operational Environmental Management Plan (OEMP), in accordance with the Conditions of Development Consent (COCs), Environment Protection Licence (EPL), relevant legislation and as part of Veolia's Business Management System (BMS). The WMP outlines the procedures for the control of waste entering the CTT including the identification and removal of unauthorised waste from the general waste stream.

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, pest and vermin and emergency response.

1.3. Legal and Other Requirements

The following regulatory framework applies to this WMP:

- Development Consent (DA 205-08-01) and subsequent modifications issued under the Environmental Planning and Assessment Act 1979, in accordance with section 89 (e) of the Environmental Planning and Assessment Act 1979 (EP&A Act)
- Environment Protection Licence (EPL 11763) issued under the *Protection of the Environment Operations Act 1997* (POEO Act)

• Protection of the Environment Operations (Waste) Regulation 2014

1.3.1. Conditions of Development Consent

The COCs related to the WMP are detailed in **Table 1.1** below.

Table 1.1 Conditions of Consent Requirements

Relevant Conditions	Requirement	WMP Reference
47	The Waste Management Plan must address, but is not necessarily limited to, the following issues: (a) Procedures for inspecting and recording each load of uncontainerised waste received at the terminal and for separating and disposing of any component of the waste that is not permitted to be accepted	Noted and addressed in the following Sections of the WMP;
	(b) Priority waste handling given to the most offensive wastes, otherwise "first in/first out" waste handling (c) Procedures for cleaning vehicles before they leave the premises in a manner that prevents the tracking of waste from the premises	a) Section 4.2.3 (Screening of waste) and 4.2.4 (Waste rejection)
	(d) An education program for all drivers of waste vehicles using the site, about waste types permitted to be received at the premises and the need to ensure their vehicle does not track waste from the premises	b) Section 4.3 (Waste Storage and Processing)
	(e) The inclusion of conditions in contracts with waste transporters addressing acceptable waste types and punitive measures for non-compliances (f) An enforcement program to be maintained for the duration of	c) Section 4.5.1 (Cleaning of Vehicles)
	the development which includes the imposition of punitive measures for delivering unacceptable waste types (g) Procedures for minimising wind blown litter from leaving the premises and for regular patrols of surrounding areas to collect	d) Section 4.4 (Waste Training Programs)
	any litter that has been carried from the premises (h) Procedures for preventing washdown waters and any other liquid that has been in contact with waste from entering the stormwater system (i) An operational contingency plan to be implemented in the event of equipment failure, industrial action or other situation that prevents the containerisation of waste that has been in the terminal building in excess of 18 hours (j) Fire management procedures including the management of fire water in a manner that will not pollute waters.	e) Section 4.4.2 (Contracts with Waste Transporters)
		f) Section 4.4.1.1 (Enforcement Program)
		g) Section 4.5.2 (Wind Blown Matter)
		h) Section 4.5.3 (Stormwater Management)
		i) Section 4.5.5 (Operational Contingency)

62 The Applicant must not cause, permit or allow any waste generated outside the premises to be received at the premises unless permitted to do so by an environment protection licence. 63 The Applicant must ensure that waste received at the premises is restricted to inert and solid waste as defined in Schedule 1, Part 3 of the Protection of the Environment Operations Act 1997 or is assessed as inert waste or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (EPA, 1999). 64 No waste shall be removed from the premises except: (a) construction waste arising from activities during the construction stage of the development (b) waste in sealed shipping containers to be transported by rail for disposal at the Woodlawn Bioreactor (c) small quantities of waste not permitted by the EPL to be received at the terminal, that have been separated out from the incoming waste stream through a documented operational procedure of regular waste inspections and associated control measures: these wastes are to be disposed of to a lawful waste facility (d) waste generated from onsite activities such as plant maintenance and repairs, that is not suitable for acceptance at the Woodlawn Bioreactor: these wastes are to be disposed of to a lawful waste facility (e) wastewater generated onsite: these wastes are to be disposed of to a lawful waste facility (f) leachate generated from the onsite management of waste: these wastes are to be disposed of to sewer (g) recyclable materials generated from the onsite office: these wastes are to be disposed of the swaste reatment plant (g) recyclable materials generated from the onsite office: these wastes are to be disposed of the swaste reatment plant (g) recyclable materials generated from the onsite office: these wastes are to be directed to a suitable recycling facility.			İ
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restricted to inert and solid waste as defined in Schedule 1, Part 3 of the <i>Protection of the Environment Operations Act</i> 1997 or is assessed as inert waste or solid waste following the technical assessment procedure outlined in Technical Appendix 1 of the Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (EPA, 1999). 64 No waste shall be removed from the premises except: (a) construction waste arising from activities during the construction stage of the development (b) waste in sealed shipping containers to be transported by rail for disposal at the Woodlawn Bioreactor (c) small quantities of waste not permitted by the EPL to be received at the terminal, that have been separated out from the incoming waste stream through a documented operational procedure of regular waste inspections and associated control measures: these wastes are to be disposed of to a lawful waste facility (d) waste generated from onsite activities such as plant maintenance and repairs, that is not suitable for acceptance at the Woodlawn Bioreactor: these wastes are to be disposed of to a lawful waste facility (e) wastewater generated onsite: these wastes are to be disposed of to a lawful waste treatment plant (g) recyclable materials generated from the onsite office: these wastes are to be directed to a suitable recycling facility. (g) Section 4.3.1 (Waste generation) (g) Section 4.2.1 (Acceptable Waste)	62	generated outside the premises to be received at the premises	addressed in Section 3.1.2 (Waste
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Waste)	64	 (a) construction waste arising from activities during the construction stage of the development (b) waste in sealed shipping containers to be transported by rail for disposal at the Woodlawn Bioreactor (c) small quantities of waste not permitted by the EPL to be received at the terminal, that have been separated out from the incoming waste stream through a documented operational procedure of regular waste inspections and associated control measures: these wastes are to be disposed of to a lawful waste facility (d) waste generated from onsite activities such as plant maintenance and repairs, that is not suitable for acceptance at the Woodlawn Bioreactor: these wastes are to be disposed of to a lawful waste facility (e) wastewater generated onsite: these wastes are to be disposed of to sewer (f) leachate generated from the onsite management of waste: these wastes are to be disposed of to sewer or a lawful liquid waste treatment plant (g) recyclable materials generated from the onsite office: these 	addressed in the following sections of the WMP; a) Refer to CEMP b) Section 4.3 (Waste Storage and Processing) c) Section 4.2 (Waste Classification and Screening) d) Section 4.2 (Waste Classification and Screening) e) Section 4.3.1 (Waste generation) f) Section 4.3.1 (Waste generation) g) Section 4.2.1
	65	The Applicant shall implement the approved Waste Management	<u>'</u>

	Plan to the satisfaction of the Planning Secretary.	
66	The Applicant will not accept asbestos at the premises. The Waste Management Plan must make provision for identification of asbestos in waste not knowingly received at the premises and for the proper and safe disposal of any asbestos so identified.	Noted and addressed in Section 4.2.2 (Unacceptable Waste)
67	Records shall be made and maintained of each load of waste entering the premises, including the identification of the vehicle, weight, nature and origin of the waste received, and whether the waste was received in pre-packaged shipping containers or for on-site containerisation.	Noted and addressed Section 4 (Waste Management Measures)
68	Records shall be made and maintained of any waste leaving the premises by motor vehicle, including the identification of the vehicle, and the weight, classification and destination of the waste.	Noted and addressed Section 4 (Waste Management Measures)
69	Records shall be made and maintained of all events involving the removal of any waste received at the premises which is not permitted to be accepted at the premises.	Noted and addressed in Section 4.2.3 (Waste Screening)

1.3.2. Environment Protection Licence

Conditions of EPL 11763 related to the WMP are detailed in **Table 1.2** below.

Table 1.2 Environment Protection Licence Requirements

Relevant Conditions	Requirement	WMP Reference
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.	Noted and addressed in Section 4.2 (Waste Classification and Screening)

	Code	Waste	Description	Activity	Other Limits	
	NA	General solid waste (putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	NA	
	NA	General solid waste (non-putrescible)	As defined in Schedule 1 of the POEO Act, in force from time to time	Waste processing (non-thermal treatment) Waste storage	NA	
L2.2	1	uthorised amound 4,000 tonnes a	t of waste permit t any one time.	ted on the prer	nises cannot	Noted
O5.1	and/or recove accord	The licensee must ensure that any general solid waste (putrescible) and/or general solid waste (non-putrescible) received for storage or recovery or processing at the premises is assessed and classified in accordance with the DECC Waste Classification Guidelines as in force from time to time.				Noted and addressed in Section 4.2.1 (Acceptable Waste)
O5.2	The licensee must ensure that each waste for recovery/recycling is stockpiled separately.				Noted and addressed in Section 4.2.1 (Acceptable Waste)	
O6.1	areas and ha	that involve the h	water managemenandling of waste ean container sto led.	including cont	ainer transfer	Noted and addressed in Section 3.1.1 (Site Features)
06.2	1	ng of mud and w naterials to exter	aste. Vehicles le nal surfaces.	aving the prem	ises must not	Noted and addressed in Section 4.5.1 (Cleaning of Vehicles)

1.4. Stakeholder Consultation

As part of an ongoing commitment to stakeholder engagement, Veolia implemented a program of communication and consultation during the preparation of this WMP. Veolia has consulted with government agencies and other key stakeholders.

1.4.1. Government Bodies

The following government agencies will be consulted with in relation the requirements of this WMP:

- NSW Department of Planning, Industry and Environment;
- NSW Environment Protection Authority;
- Cumberland City Council

1.4.2. Community

Veolia aims to ensure that the local community is kept informed of the progress of the project in a proactive and responsive manner. Veolia's communication may include the following where applicable:

- public notices and announcements;
- meetings and correspondence with appropriate regulatory authorities; and
- discussions with adjoining landowners / neighbours who may be affected by the CTT.

The key objectives of the community focused communication and consultation program include:

- Educating stakeholders regarding key aspects of the CTT; and
- Informing community groups and neighbours to help Veolia understand concerns.

The following avenues provide availability of information about the CTT:

- Dedicated Veolia webpage: https://www.veolia.com/anz/our-services/our-facilities/transfer-stations/clyde-transfer-station
- Community telephone line and email address:

Location	Contact
CTT 24 hour feedback line	(02) 9841 2600
Dedicated email address	clyde.weighbridge@veolia.com

- Published Monitoring 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

2. Goals of WMP

The specific goals of the WMP are to document operational strategies for the CTT to detail:

- Waste screening processes;
- Waste handling and loading procedures;
- Managing non conforming waste; and
- Managing potential impacts from operational disruptions

2.1. Roles and Responsibilities

The following table details the roles and responsibilities associated with the WMP.

Table 2.1 WMP Roles and Responsibilities

Action	Responsibility	Timing
Overall Implementation of the WMP	Facility Manager	Ongoing
Action Operational Contingency Plan	Facility Manager	For operational failures
Identify non-conforming waste and notify Facility Manager	Plant Operator(s) and Weighbridge Operator	On receipt of waste not conforming with EPL or consent
Informing customer of any non-conforming waste	Facility Manager or Sales Manager	As required
Training and communication	Facility Manager or NSW Environmental Advisor	Training as required, 12 monthly corporate refreshers Review of any complaints received or incidents, and reports from audits or monitoring conducted

3. Existing Environmental and Operational Impacts

3.1. Existing Environment

3.1.1. Site Features

The CTT consists of the transfer terminal building incorporating site offices and amenities, and associated road and rail infrastructure, including:

- An access road for waste trucks entering and exiting the facility from Parramatta Road
- A weighbridge for incoming and outgoing trucks 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 an air extraction system and a dust suppression system
- Two compactors
- A hardstand area for temporary storage and manoeuvring of loaded and empty sealed shipping containers prior to loading on to trains
- Rail sidings for the loading of sealed containers onto trains for rail transport to Woodlawn
- Parking area for staff and visitors
- A main office building parallel to the parking area

Additional details of the CTT facility are provided in Section of 3.2 of the OEMP.

3.1.2. Waste Operations

The operation of the CTT includes receipt of solid waste from municipal, commercial and industrial sources within the Sydney Metropolitan Area (SMA) as follows:

- Waste is accepted, weighed and unloaded on the tipping floor of the transfer terminal building, where screening for non-conforming waste is completed in accordance with the EPL.
- The waste is pushed by front end loaders into compactors via a chute. Scales within the compactors are used to notify the operators of the weight of waste in real time.
- The waste is then compacted and transferred from the compactor into a modified 40 foot shipping container with the use of a hydraulic ram.
- Loaded shipping containers are transferred 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.
- Empty shipping containers are unloaded daily from train wagons.

Procedures for the operation of plant and equipment on site, including front end loaders, compaction units, and container handlers are detailed within BMS.

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

- Unloading of containers at the IMF and transporting them by road on quad axle trailers to the Woodlawn 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.

3.2. Predicted Waste Impacts

The principal potential waste impacts associated with operations of the CTT include:

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

The EIS identified potential waste impacts and risks associated with the operation of the CTT. **Table 3.1** lists these impacts and the risk assessment, which determined the level of mitigation required for those impacts.

Table 3.1 Waste Impact Risk Rating

Issue	Potential Impact	Source	Risk Ranking	Key Issue
Waste Management	Odour emissions from putrescible waste	The handling of large quantities of waste at the facility has potential to result in the emissions of odour	Moderate	Yes, refer to Air Quality Management Plan (AQMP)
	Disruption to operations	Unplanned disruption to terminal operations resulting in large quantities of waste being stored on site	Moderate	Yes refer to Section 4.5.5
	Release of leachate to stormwater	Failure to separate leachate generated at CTT from stormwater resulting in environmental harm	High	Yes, addressed in design of site and management controls, refer to Stormwater Management Plan (SMP)
	Receipt of non-conforming wastes at the site	Waste which the EPL does not permit to be handled at CTT is brought to the site.	Moderate	Yes, refer to Section 4.2

4. Waste Management Measures

4.1. Waste Management System

All waste transport vehicles entering the CTT are required to go via the incoming weighbridge. The customer information is entered into the Paperless Weighbridge System (PWS) prior to their arrival on site to ensure all customers are aware of conforming and non-conforming waste. The weighbridge operator is responsible for verifying the vehicle's registration number in PWS. Once the customer is verified and the weight is recorded, the weighbridge operator directs the trucks to the transfer terminal building for processing.

Waste transport vehicles exiting the site are weighed on the outgoing weighbridge to confirm the weight of waste deposited at the site.

All weighbridges on the site are National Measurement Institute (NMI) approved and maintained in proper working order and are certified at least once a year in accordance with the *Commonwealth National Measurement Act 1960.*

Records of waste transport are maintained by Veolia for submission to the EPA and quantification of the waste levy payable.

4.1.1. Waste Tracking

The weighbridge is the primary location on site for tracking waste, including monitoring the quantity, type and source of waste received on site, and the quantity, type and quality of the outputs produced on site.

The waste management system implemented at the weighbridge enables appropriate documentation prior to acceptance of waste at the site. This system also records any materials separated from the general waste stream and taken off site for reuse or recycling.

Veolia utilises PWS, across all sites, including connection with SAP accounting and record keeping software/database. The PWS architecture is designed for 24/7 operation, store and forward technology is used in all components to ensure data is not lost, and once connectivity is established, queued data flows in both directions automatically. This system allows each site to record the following information:

- Date
- Vehicle Registration
- Customer
- Waste type
- Gross and Tare Weight
- Gross and Tare Time
- PWS Docket Number

The following figures show details of this system.

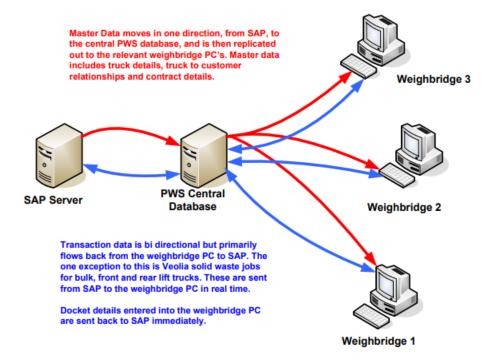


Figure 4.1 SAP and PWS Interface

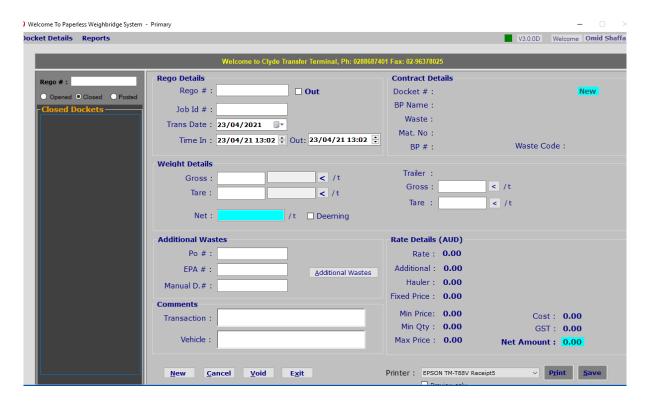


Figure 4.2 PWS Data Entry System

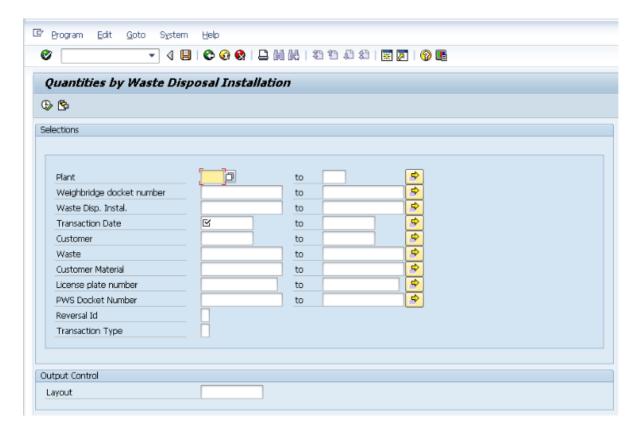


Figure 4.3 SAP Report Generation System

4.2. Waste Classification and Screening

The CTT is licensed to accept the following waste types and operate 24 hours per day, 7 days per week:

- General Solid Waste (Putrescible)
- General Solid Waste (Non-Putrescible)

The EPL permits waste processing (non thermal treatment) and waste storage activities at the facility.

4.2.1. Acceptable Waste

Waste defined as General Solid Waste (Putrescible), under Schedule 1 of the POEO Act, including any other wastes approved by the NSW EPA in accordance with the CTT's EPL are accepted at the facility.

These waste types are defined is the Waste Classification Guidelines Part 1: Classifying Waste (NSW EPA, 2014) as follows:

4.2.1.1. Putrescible waste

The following wastes (other than special waste, liquid waste, hazardous waste or restricted solid waste) have been pre-classified by the EPA as 'general solid waste (putrescible)':

- household waste that contains putrescible organics
- · waste from litter bins collected by or on behalf of local councils
- manure and night soil, disposable nappies, incontinence pads or sanitary napkins
- food waste
- animal waste

- grit or screenings from sewage treatment systems that have been dewatered so that the grit or screenings do not contain free liquids
- any mixture of the wastes referred to above.

4.2.1.2. Non-putrescible waste

The following wastes (other than special waste, liquid waste, hazardous waste, restricted solid waste or general solid waste (putrescible)) are pre-classified as 'general solid waste (non-putrescible)':

- glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal
- paper or cardboard
- household waste from municipal clean-up that does not contain food waste
- waste collected by, or on behalf of, local councils from street sweepings
- grit, sediment, litter and gross pollutants collected in, and removed from, stormwater treatment devices and/or stormwater management systems, that has been dewatered so that they do not contain free liquids
- grit and screenings from potable water and water reticulation plants that has been dewatered so that it does not contain free liquids
- garden waste
- wood waste
- waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions
- containers, previously containing dangerous goods, from which residues have been removed by washing or vacuuming
- drained oil filters (mechanically crushed), rags and oil-absorbent materials that only contain non-volatile petroleum hydrocarbons and do not contain free liquids
- drained motor oil containers that do not contain free liquids
- non-putrescible vegetative waste from agriculture, silviculture or horticulture
- building cavity dust waste removed from residential premises or educational or child care institutions,
 being waste that is packaged securely to prevent dust emissions and direct contact
- synthetic fibre waste (from materials such as fibreglass, polyesters and other plastics) being waste that is packaged securely to prevent dust emissions, but excluding asbestos waste
- virgin excavated natural material
- building and demolition waste
- asphalt waste (including asphalt resulting from road construction and waterproofing works)
- biosolids categorised as unrestricted use, or restricted use 1, 2 or 3, in accordance with the criteria set out in the Biosolids Guidelines (EPA 2000)
- cured concrete waste from a batch plant
- fully cured and set thermosetting polymers and fibre-reinforcing resins
- fully cured and dried residues of resins, glues, paints, coatings and inks
- any mixture of the wastes referred to above

4.2.2. Unacceptable Waste

Hazardous, liquid and industrial waste would not be allowed at the site. The following non-conforming waste types are not accepted at the CTT:

- Radioactive wastes;
- Toxic wastes including any;
 - Material containing arsenic, cyanide or sulphide.
 - Toxic soluble salts of the following metals: barium, boron, cadmium, copper, chromium, lead, manganese, mercury, selenium, silver or zinc.
- Pesticide or weedicide, in particular any of the following:
 - Chlorinated hydrocarbons.

- o Fluorinated hydrocarbons.
- Organophosphates.
- o Carbamates.
- Phenols.
- Soluble acid or alkali or acidic or basic compounds;
- Liquid wastes;
- Hazardous wastes e.g. Asbestos;
- Any flammable liquid or material deriving from grease, oil, tar petroleum, shale or
- coal
- Any sludge or material (unless it can be shown to be innocuous and harmless) being the refuse from any industrial process carried out in any:
 - Tanning or leather processing plant.
 - o Petroleum or petrochemical plant.
 - o Chemical plant.
 - o Paint manufacturing plant.
 - Metal treatment plant.
 - o Vegetable oil or mineral oil processing plant.
 - o Pharmaceutical or drug manufacturing plant.
 - Medical and quarantine wastes; and
 - Dead animals.

The following waste types may be targeted for removal from the general waste stream as they have the potential to limit the effectiveness and/or damage the slug compactors:

- Timber waste;
- Bricks:
- Concrete:
- Batteries:
- Bulky items (eg. drums);
- · Ferrous metals; and
- Non-ferrous metals.

4.2.3. Screening of Waste

There are two main screening points for identification of the type of waste received as it is delivered to the site:

- The weighbridge operator queries the driver as to contents of load as well as a visual inspection of the load, if necessary, before directing the vehicle to enter the facility.
- The operator of the front end loader inspection of the waste as it is discharged from the vehicle, to check for non-conforming waste and easily extractable, bulk recyclable waste.

Details of the waste received, including identification of the vehicle, weight, nature and origin of the waste, are recorded at the weighbridge, and inspection of the load is undertaken at the unloading point to verify information provided at the weighbridge.

4.2.4. Waste Rejection

If any waste is detected that is not acceptable through the screening process, it shall be rejected and shall not be disposed of without further investigations, assessment and appropriate statutory consent.

Work instructions are accessible on BMS and on site which provide guidance on the acceptance, screening and rejection of waste, including the identification of any unacceptable wastes and how to deal with these materials.

Refer to <u>Weighbridge Operations Work Instruction (WIS-5539)</u> for more information on the processes for waste rejection.

4.3. Waste Storage and Processing

Once inside the transfer building, waste trucks are directed to deposit the waste on the tipping floor. Waste is generally handled on a first in / first out basis. However, if a waste load is identified as either odorous or dusty, that load would be prioritised by the front end loader or excavator operator for immediate compaction.

If a load is identified as offensive (odorous or dusty) it is prioritised for compaction and loading into the sealed containers and recorded using the Incident Management System. This is supplemented with spot checks by the Facility Manager or site personnel.

Where non conforming waste is detected, this waste would be separated from the general waste stream and set aside for removal offsite to a facility licensed to receive this type of waste for processing, recycling or disposal.

The tipping floor and compaction unit areas are cleared on a daily basis, where feasible, to ensure that waste is being processed within a manageable timeframe. These procedures also assist with general housekeeping and cleanliness on site.

These processes implemented within the transfer terminal building ensure that the CTT and other related facilities are able to operate in the most efficient manner through the separation and processing of waste types in the most appropriate way.

4.3.1. Waste Generation

Waste is generated on site through offices, lunch rooms and other site activities. These waste streams could potentially include:

- General solid waste (putrescible) mixed residual waste.
- General solid waste (non-putrescible) recyclable materials (such as paper, plastic containers, glass containers and aluminium cans), cardboard and plastic packaging, and maintenance items consumables.
- Liquid waste leachate generated on site and transferred to the Woodlawn Eco Precinct (as described in the Stormwater Management Plan (SMP).

Appropriate waste receptacles are provided throughout the site to enable the segregation of recyclables and general waste on site. General waste is processed through the facility and recyclable material is transported off site to an appropriately licenced facility for recycling of material.

4.4. Waste Training Programs

4.4.1. **Drivers**

In accordance with Condition 47(d), an education program has been developed to ensure all drivers accessing the site are inducted in the conditions of site entry. Details regarding this training program are provided in **Section 4.2.2** of the OEMP.

The induction program is supported by the following measures:

- Verbal advice from weighbridge operator;
- Printed material to be handed to the driver at the weighbridge;

- Spot checks by Facility Manager or site personnel);
- · Tool box meetings; and
- Site entry signage.

4.4.1.1. Enforcement Program

In accordance with condition 47(f), an enforcement program has been developed which includes imposition of punitive measures for delivering unacceptable wastes. This enforcement program is based on a three strikes principle, which is consistent with Veolia's policy for disciplinary measures. The following table outlines the measures to be implemented for any breach of waste acceptance requirements.

Offence	Action - Veolia employee	Action - External driver
First	Verbal warning	Verbal warning
Second	Written warning and re- attendance to induction training session	Written warning and re-attendance to induction training session
Third	Re-posting to another site or retrenchment	Refused entry to site for driver

4.4.2. Contracts with Waste Transporters

Contracts undertaken with waste transporters include conditions addressing acceptable and unacceptable waste types and possible enforcement programs. These contracts are based on existing service agreements for customers.

4.4.3. Operators

As part of the site induction requirements, and in addition to operational training requirements, employees are also trained in a range of waste processing related areas including:

- Waste tracking
- Waste classification
- Control of non-conforming waste

This training ensures that staff receive adequate training to be able to recognise and handle any hazardous or other prohibited waste.

4.5. Operational Contingency Control Measures

The environmental control measures in relation to management of all operational aspects of the CTT have been detailed in their respective site specific management plans. Detailed below are a number of issues relating specifically to the delivery of waste.

4.5.1. Cleaning of Vehicles

The cleaning of vehicles is an activity not permitted at the CTT site under normal circumstances. Measures in place to minimise the likelihood of this requirement include the following:

- The loader operator directs the driver to the appropriate area of the terminal building ensuring that the vehicle does not track over waste located within the building:
- The building floor is cleaned regularly:
- All Veolia Company vehicles are regularly cleaned at other depots; and
- Commercial Contracts with other vehicles include requirements of regular cleaning at an approved facility.

However, in rare circumstances, where the condition of the vehicle is such that the exterior is significantly unclean arising from the tipping of waste matter in the building, and has created the possibility of environmental contamination, vehicle washing is permitted. This involves:

- Parking the vehicle in the "hot load" area or away from other vehicles in the building; and
- Hosing down the exterior of the vehicle to remove offending matter.

Use of the "hot load" area or an area within the building ensures any run-off is captured and disposed of at an approved facility.

4.5.2. Wind Blown Matter

Wind blown matter is addressed by using the following controls:

- All waste is unloaded within the terminal building
- Daily litter patrols of the site are conducted by site personnel

Results of the litter patrol, including corrective actions taken to ensure wind blown litter does not leave the premises, are recorded on the Weekly Site Inspection Checklist, which forms part of the BMS.

4.5.3. Stormwater Management

The terminal building floor has been designed so that any water that may come into contact with the waste is directed to the leachate sump for collection and appropriate disposal offsite. Refer to the SMP for additional details on the stormwater system.

4.5.4. Fire Water Management

Procedures for the management of fire water, to minimise potential pollution of surface water is detailed in the Emergency Response Plan for the CTT, this incorporates the Incident Response Plan under the COCs.

Hot loads are managed using the Hot Load Management Work Instruction - WIS-5541.

4.5.5. Operational Contingency

In accordance with conditions 47(i) and 48(g), the Operational Contingency Plan (**Table 4.1**) will be implemented in the event that waste containerisation is prevented in excess of 18 hours, such as equipment failure, an emergency or industrial action. The Facility Manager will be informed of any such event and provide further direction in accordance with the plan. The Operational Contingency Plan will also be updated in line with the commencement of expanded operations under DA No. 205-08-01 MOD 5, as per consent condition 54A. This has not yet been triggered as the waste volumes at CTT have remained well below the 600,000 TPA limit.

Operations at the CTT have the potential to be disrupted by various internal and external factors. Some disruptions may be planned, such as scheduled maintenance work on the rail infrastructure or compactors, while other disruptions may occur without notice. Potential sources of disruption to the operation of the site and remediation measures are shown in **Table 4.1.**

Table 4.1 Operational Contingency Process

External Factor	Potential Impact	Remedial Measure
Power disruption	Compactors inoperative; Lighting inoperative; Data and communication facilities inoperative.	CTT located on the end of the electricity loop. Power disruption may be overcome by alternative power feed. However, in the event total power failure is experienced, the following procedure shall be adopted: - Continue to receive waste matter until Terminal Shed capacity has been reached Advise clients to redirect vehicles to alternative sites.
Rail Service disruption (scheduled)	Unable to transport loaded containers to Woodlawn; Unable to receive empty containers from Woodlawn.	Schedule transportation of additional containers from Woodlawn to Clyde to increase storage capacity of compacted waste. Continue to receive waste matter until Terminal Shed capacity has been reached. Advise clients to redirect loads to alternative Transfer Facilities or Landfill Sites.
Rail Service disruption (unscheduled)	Unable to transport loaded containers to Woodlawn; Unable to receive empty containers from Woodlawn.	Continue to receive waste matter until Terminal Shed capacity has been reached. Advise clients to redirect loads to alternative Transfer Facilities or Landfill Sites.
Failure of Front-end Loader	Inability to push waste into compactor opening and produce compacted slug.	Equipment supplier contracted to supply alternative unit within 4 hours of notification; Back-up Unit to be purchased and housed on CTT site; Hire of 2nd Unit from various suppliers; Engagement of contractor on "wet-hire" basis.
Failure of Container Handler	Inability to load and unload containers	Equipment supplier contracted to provide on-site breakdown maintenance service; Sufficient quantity of containers to continue the compaction process. Remaining Unit can continue to retrieve and supply containers; Hire of 2nd Unit from various suppliers; Engagement of contractor on "wet-hire" basis. Second Unit to be purchased to ensure efficient continuity of operation.
Failure of Sweeper	Inability to provide ongoing site sweeping	Equipment supplier contracted to provide on-site breakdown maintenance service; Use Skidsteer unit with sweeper attachment; Hiring of alternative unit; Engagement of contractor on "wet-hire" basis.

This Operational Contingency Plan will be implemented in the event of an operational disruption as outlined above. The Facility Manager will be informed of any such event and provide further direction in accordance with the plan.

In addition, the Facility Manager will also be mindful of the volumes of waste accepted at the site in accordance with the maximum waste input rates as well as the waste storage limits on site.

5. Waste Monitoring and Reporting

5.1. Monitoring Program

Inspection, testing and monitoring will be undertaken at the CTT, in accordance with the site specific inspection and testing schedule. The outcomes of monitoring will be recorded in appropriate forms/checklists as detailed in **Section 5.1.1** of the OEMP.

Inspection and monitoring checklists for waste management during the operational phase of the CTT are held on the BMS.

The Facility Manager is responsible for monitoring the effectiveness of all waste management measures on site.

Regular 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 site Inspection and Testing Program as summarised in **Table 5.1** below.

Item	Type of Inspection / Testing	Frequency of Inspection	Responsibility
Weighbridge	Certification and / or calibration	Annual	Plant Maintenance Supervisor
Compactors 1 & 2	Calibration	Annual	Plant Maintenance Supervisor
Waste volume monitoring - Storage on site - Annual limit	- Inspection (waste on floor) - Tonnage data review	Daily	Facility Manager, Leading Hand(s)
Site inspection and housekeeping checks	Inspection	Weekly	Leading Hand or nominated person

Table 5.1 Waste Monitoring Program

5.2. Performance Reporting and Review

Annual management reviews of the environmental performance of the CTT will assess the continuing suitability, adequacy and effectiveness of the on-site environmental management measures implemented. This review will include performance against the goals of the WMP. This review would include consideration of any reasonable and feasible measures that may improve the management of waste at the site and prioritisation of any recommendations for implementation.

Where performance reporting is required under the COCs or EPL, all relevant information will be recorded and maintained on site. This will include, but not be limited to, the following:

Sampling dates, times and name of sampler;

- Chain of Custody, analysis and results;
- Complaints received and corrective actions taken; and
- Copy of the EPL, development consent and other relevant approvals.

Veolia will use monitoring data to review and identify any exceedances against the adopted goals with the appropriate corrective actions applied as discussed below.

Details of compliance reporting requirements are provided in Section 5.1.2 of the OEMP.

5.3. Exceedances and Corrective Actions

Handling of any waste related complaints will be managed in accordance with the process outlined in **Section 4.3.4** of the OEMP. The Facility Manager, or their site nominee, will record and manage all complaints in accordance with Veolia's complaints handling, notification and reporting procedures.

Any waste related incidents will be managed in accordance with Veolia's Incident Management Standard. Investigations, where required, will be undertaken as per the same standard on a case by case basis depending on the severity of the incident as described in **Section 5.1.1** of the OEMP.

Notification, emergency response and reporting requirements relating to incidents are detailed in **Section 4.4** of the OEMP, as well as detailed in the Emergency Response Plan (ERP) for the CTT, which incorporates the Pollution Incident Response Management Plan (PIRMP).

At completion of any investigation, any corrective actions required will be recorded in Veolia's online incident and audit management system, Rivo, and managed in accordance with the <u>Continual Improvement Procedure</u> (<u>PRO-151</u>) in a timely manner as described in **Section 5.1.1** of OEMP.

The process for incident response is summarised in the figure below.

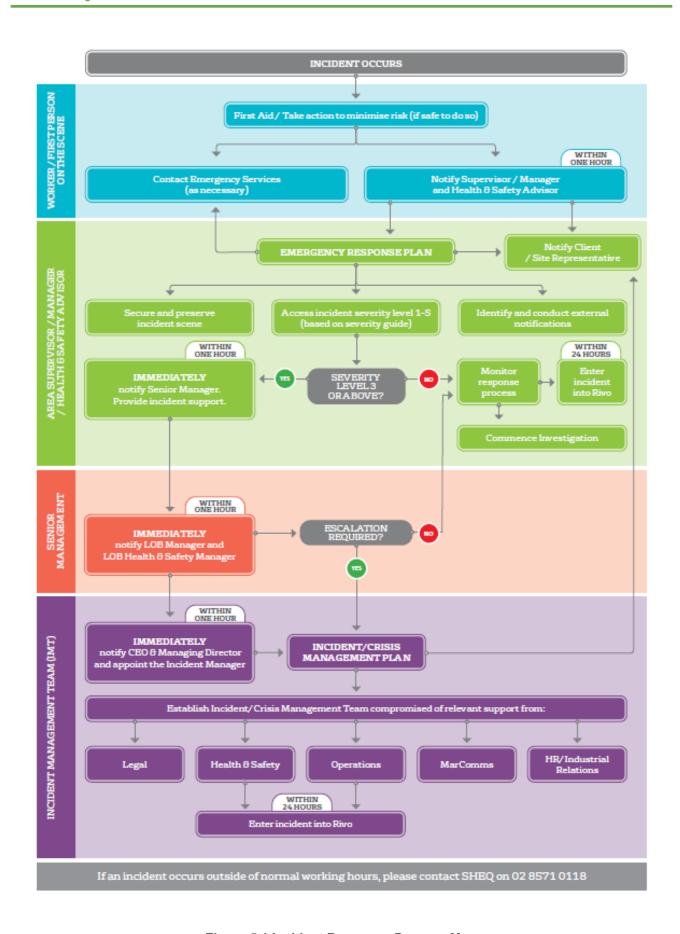


Figure 5.1 Incident Response Process Map

5.4. Publishing of Monitoring Data

Where required, Veolia publishes the results of any environmental monitoring required under the EPL on the following website:

https://www.veolia.com/anz/about/about-veolia/operational-compliance/nsw-monitoring-reports

References

Document Name

Maunsell McIntyer (2001a). *Clyde Transfer Terminal Environmental Impact Statement,* Maunsell McIntyer Pty Ltd. August 2001.

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NSW EPA (2014) Waste Classification Guidelines Part 1: Classifying Waste, NSW Environment Protection Authority. November 2014.

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