Appendix G

Waste Acceptance Protocol (including Sampling Analysis and Quality Plan and Waste Delivery Plan)

VANZ

Woodlawn ARC Waste Acceptance Protocol

00288-R-02-P00-0001

Issue Date: 28/09/22

Purpose	The purpose of this WAP is to address the requirements set out in the Planning Secretary's Environmental Assessment Requirements (SEARs) issued to Veolia for the Woodlawn ARC. The relevant SEARs requirements are as follows: 1. Demonstration that waste used as a feedstock in the facility would be the residual from a resource recovery process that maximises the recovery of material in accordance with the NSW Energy from Waste Policy Statement (EPA, 2021) 2. A detailed waste input sampling and monitoring program including a detailed description of waste processing procedures for each waste type received, how inappropriate materials will be excluded from the waste stream and contingency measures that would be implemented if inappropriate materials are identified.

Scope	This plan is preliminary and applies to the Woodlawn ARC project only
Review Frequency	N/A

Contents

Revision History

Revision	Date	Document Status
A	21/09/2021	DRAFT issue for client review
B	21/10/2021	DRAFT issue for client review
C	26/10/2021	DRAFT issue for client review
D	10/11/2021	FINAL issue
E	22/02/2022	DRAFT EIS adequacy review
F	04/03/2022	FINAL issue - EIS adequacy review
G	24/03/2022	FINAL issue
H	30/06/2022	FINAL issue
I	28/09/2022	Sampling schedule clarified

1 Introduction

1.1 Objectives

The key objectives of this report are the following:

- To detail how Veolia will manage feedstock, with reference to the NSW Energy from Waste Policy Statement (NSW EfW Policy), will be utilised in the Woodlawn ARC
- To detail how Veolia will ensure that the feedstock does not exceed the maximum allowable percentage of residual waste allowed for energy recovery outlined in the NSW EfW Policy
- To describe the waste processing procedures to identify and remove non-conforming feedstock
- To outline the waste sampling and monitoring program to be implemented to monitor the Woodlawn ARC feedstock

1.2 Report Structure

To provide guidance to the reader, the following provides a list of the objectives and corresponding report sections:

- Objective 1 – described in Section 3
- Objective 2 – described in Section 5
- Objective 3 – described in Section 4, 5 and 6
- Objective 4 – outlined in Section 4, 5 and 6

This Waste Acceptance Protocol is a "living document" and will be updated periodically as new technology emerges and new standards for environmental performance are adopted industry wide.

2 Project Description

2.1 Woodlawn ARC

The Woodlawn ARC will be located within Veolia's Eco Precinct, which is situated 250 km south of Sydney in regional New South Wales (NSW), near the town of Tarago approximately 40 km south-west of Goulburn (refer Figure 2-1). The bioreactor landfill and mechanical biological treatment (MBT) facility on site currently process 40% of Sydney's residual putrescible waste.

The Woodlawn ARC will divert and thermally treat up to 380 kilotonnes per annum (ktpa) of residual waste in line with the NSW EfW Policy. The feedstock will consist of approximately 80% residual municipal solid waste (MSW) and 20% residual commercial and industrial (C&I) waste.

The receipt of this existing waste via rail from Sydney and road from surrounding areas has already been approved for the existing waste operations.

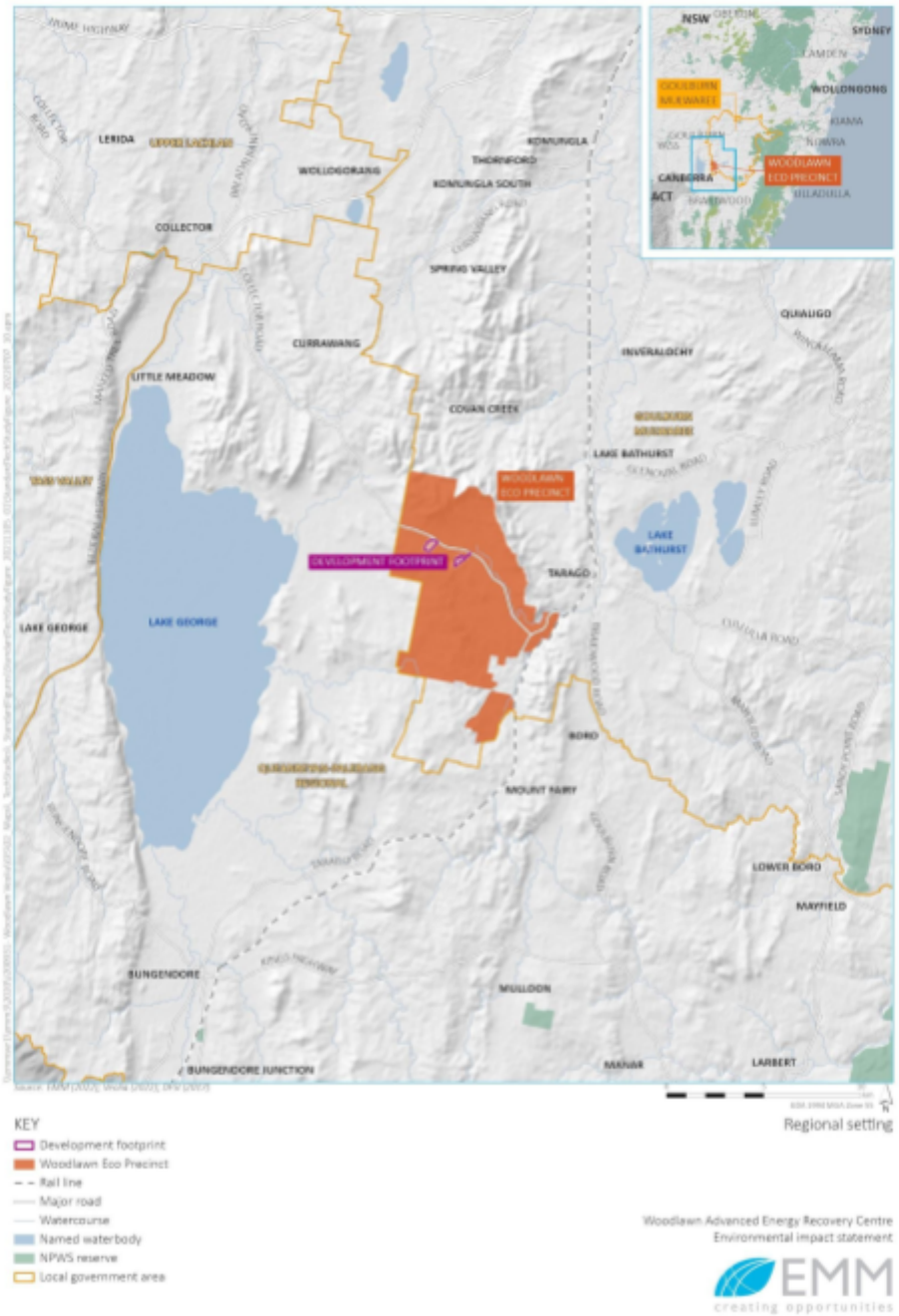

Figure 2-1: Woodlawn Eco Precinct Location[1]

2.2 Waste Feedstock

Veolia has a significant share of the MSW and C&I waste collection markets in Greater Sydney, with a collections portfolio that includes both long-term contracts with councils and shorter-term contracts with C&I customers. This share of the market provides confidence in the ability to retain or replace contracts over the long term to maintain the quantity and quality of feedstock. The Woodlawn ARC waste feedstock will be supplied by these existing contracts.

2.3 Waste Logistics

Waste feedstock for the Woodlawn ARC will be transported to the Eco Precinct in accordance with current approvals.

The Woodlawn Eco Precinct is part of an integrated waste management system. This includes two waste transfer terminals (WTT), one located at Clyde (refer **Figure 2-2**) and the other one at Banksmeadow (refer **Figure 2-3**) in Sydney, as well as Crisps Creek Intermodal Facility (IMF) in nearby Tarago (refer **Figure 2-4**).

The waste streams (residual MSW and C&I) generated in Sydney are collected, sorted, containerised and transported by rail to the Crisps Creek IMF in Tarago from Veolia's Sydney based WTT's at Clyde and Banksmeadow. The waste containers are unloaded at the IMF and transferred by road to the Woodlawn Eco Precinct. As the Woodlawn ARC is co-located, no additional transportation is required to provide feedstock for the Woodlawn ARC.

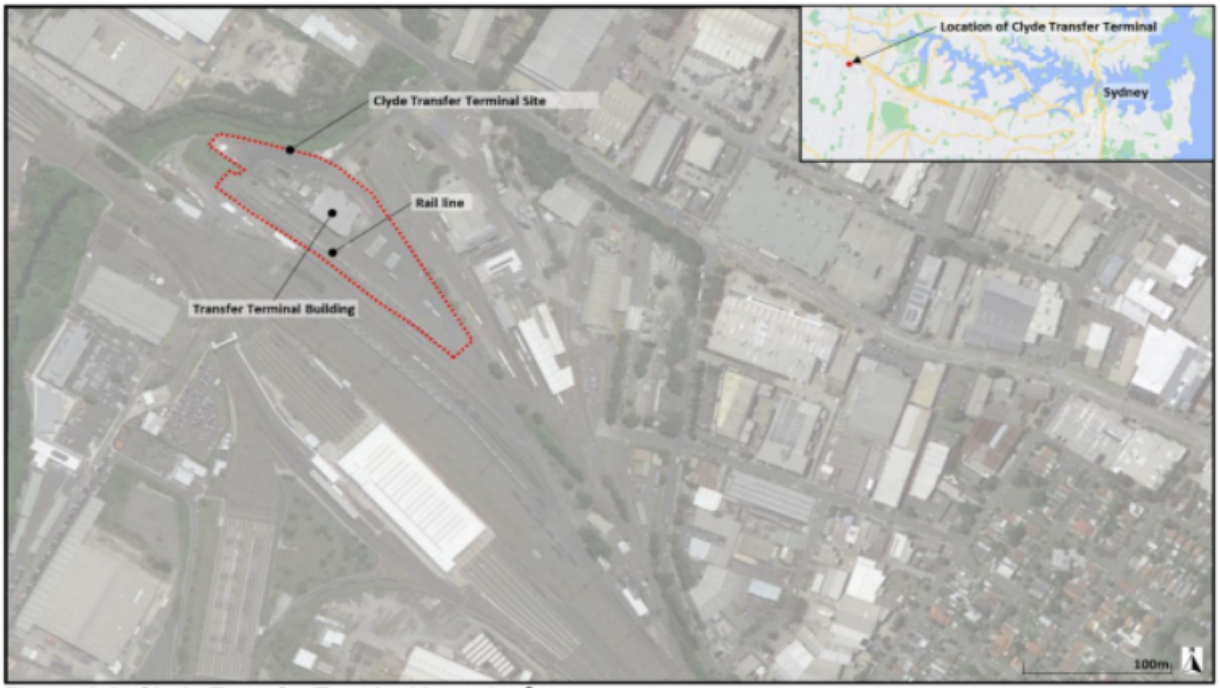

Figure 2-2: Clyde Transfer Terminal Location

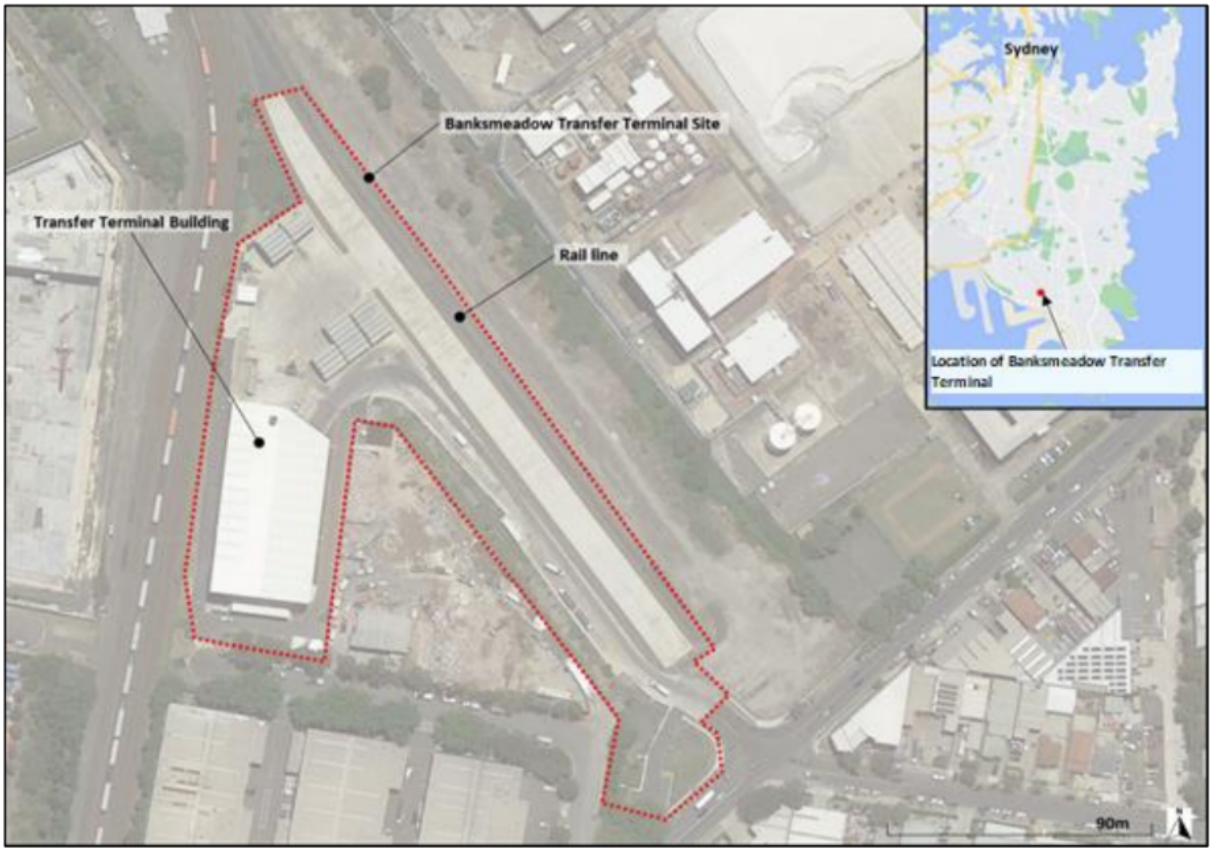

Figure 2-3: Banksmeadow Transfer Terminal Location

Figure 2-4: Crisps Creek Intermodal Facility Location

3. Policy Context

3.1 NSW Energy from Waste Policy Statement (2021)

3.1.1 Overview

The NSW EfW Policy sets out the policy framework and overarching criteria that apply to facilities in NSW proposing to thermally treat either, or both, waste or waste-derived materials for the recovery of energy and in doing so provides regulatory clarity to industry and the community.

The Woodlawn ARC is defined as an energy recovery facility (ERF), as it will thermally treat waste-derived materials that fall outside the list of low-risk eligible waste feedstocks[1] stipulated in the guidelines of the NSW EfW Policy. Therefore, it is subject to the requirements of an ERF.

This requires the ERF to demonstrate current international best practice techniques and the use of technologies that are proven, well understood and capable of handling the expected variability and type of waste feedstock. This must be demonstrated through reference to fully operational plants using the same technologies and treating like waste streams in other similar jurisdictions.

The ERF's source of feedstock must also adhere to strict resource recovery criteria.

3.1.2 EFW Feedstock Criteria

The NSW Environment Protection Authority (EPA) considers energy recovery to be a complementary waste management option for residual waste produced from material recovery processes or source-separated collection systems.

The NSW EfW Policy objectives in setting resource recovery criteria are to:

- Promote the source separation of waste where technically and economically achievable;
- Drive the use of best practice material recovery processes; and
- Ensure only the residual waste from genuine resource recovery operations are eligible for use as a feedstock for an energy recovery facility

The final bullet is of direct importance to the Woodlawn ARC, as the waste feedstock to be used must adhere to this criterion. Table 3-1 presents the relevant criteria from the NSW EfW Policy for an ERF to receive residual waste feedstock from waste processing facilities or collection systems.

[1] *Eligible waste fuels are listed in Section 3 of the NSW Energy from Waste Policy Statement (2021)*

Table 3-1: Resource Recovery Criteria for Energy Recovery Facilities - Mixed Waste Streams[2]

Mixed Waste Stream	Processing facility	% residual waste allowed for energy recovery
Mixed municipal waste (MSW)	Facility processing mixed MSW where a council has separate collection systems for dry recyclables and food and garden waste.	No limit by weight of the waste stream received at a processing facility.
	Facility processing mixed MSW where a council has separate collection systems for dry recyclables and garden waste.	Up to 40% by weight of the waste stream received at a processing facility.
	Facility processing mixed MSW where a council has a separate collection system for dry recyclables.	Up to 25% by weight of the waste stream received at a processing facility.
Mixed Commercial and industrial waste (C&I)	Facility processing mixed C&I waste	Up to 50% by weight of the waste stream received at a processing facility.
	Facility processing mixed C&I waste where a business has separate collection systems for all relevant waste streams.	No limit by weight of the waste stream received at processing facility.

Therefore, the Woodlawn ARC's feedstock composition will need to comply with the following:

- 100% of residual MSW from councils that source segregate dry recyclables and food organics and garden organics (FOGO)
- 40% by weight of residual MSW from councils that source segregate dry recyclables and garden organics only
- 25% by weight of residual from councils that only source segregate dry recyclables
- 100% by weight of C&I waste received from C&I clients that have a complete sweep of collection systems
- 50% by weight of C&I waste received from facilities processing mixed C&I waste

3.1.3 Feedstock Compliance

Currently, all metropolitan Sydney councils offer a commingled recycling service. In addition, they will be required by the NSW Waste and Sustainable Materials Strategy 2041 to transition to offer FOGO collection services by 2030. The eventual outcome being that all residual MSW in Greater Sydney will be fully source separated by 2030.

Therefore, the proposed feedstock for the Woodlawn ARC will comply with the NSW EfW Policy, with a progressive increase from 25% (in 2022) to 100% (in 2030) of the residual waste allowed for energy recovery.

[2] *Excerpt from the NSW Energy from Waste Policy Statement (2021) Table 4*

3.2 Other Relevant Legislation & Policy

In conjunction with the NSW EfW Policy, the following NSW legislation is relevant to the Woodlawn ARC:

- Protection of the Environment Operations Act (1997) – sets the framework to ensure that human health and the environment are protected from the inappropriate use of waste
- Protection of the Environment Operations (Waste) Regulations (2014) – sets out to improve the NSW EPA's ability to protect human health and the environment through key changes and amendments to thresholds for environment protection licences and reforms to the waste levy system
- Waste Avoidance and Resource Recovery Act (2011) – aims to ensure that waste management is undertaken in accordance with the waste hierarchy in that resource management options are prioritised in the following order:
    - Avoidance of unnecessary resource consumption
    - Resource recovery (including reuse, reprocessing, recycling and energy recovery)
    - Disposal
- NSW Waste and Sustainable Materials Strategy 2041 – outlines key state-wide recycling targets that with the potential to materially impact putrescible waste volumes and/or composition
- Energy from Waste Infrastructure Plan (2021) – Supports the NSW Waste and Sustainable Materials Strategy 2041 and identifies where Energy from Waste infrastructure can be located in NSW.
- Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022 - outlines acceptable locations and facilities for energy from waste, and applies the precautionary principle where there is a greater risk of harm to human health due to high population or existing air quality impacts.

4 Waste Separation and Sampling Strategy

4.1 Overview

The waste separation and sampling strategy for the feedstock comprises three stages. This multi-staged waste separation and sampling regime enables unsuitable waste to be identified and removed at more than one location, providing redundancy, and minimising the risk of non-conforming waste being treated by the Woodlawn ARC. Sampling and auditing at two locations allows for the assessment of the waste stream at different stages of the process, seeking to ensure compliance and quality control throughout. Third party auditor services shall be employed to provide independence and NATA accredited laboratories shall be used for all chemical analysis.

A visual representation of the strategy is presented in **Figure 4-1**.

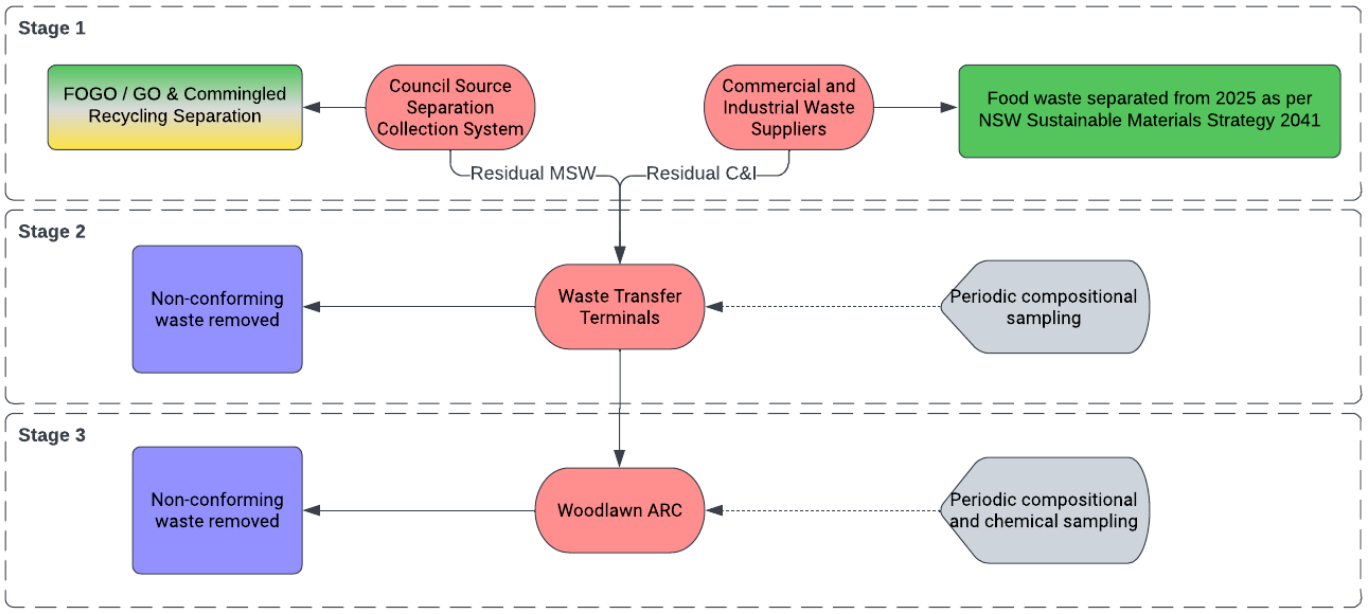

Figure 4-1: Waste Separation and Sampling Strategy

4.2 Stage 1 - Source Separation

Stage 1 comprises the council's waste collection system, which separates waste into different streams, depending on each council's level of source separation. Municipal streams received at the WTTs include residual MSW to be processed by the Woodlawn ARC, MBT or bioreactor landfill and FOGO/GO to be processed by the MBT. These streams are received from source separated collection services and will remain separate through the WTTs. Source separated residual C&I waste is also delivered to the WTTs by C&I waste collectors in separate trucks, allowing for differentiation from the MSW deliveries and enabling compliance with the NSW EfW Policy. As the WTTs only accept waste deliveries from contracted customers, there is a higher level of control and understanding of the type of waste being delivered to the WTTs when compared to facilities that are open to the public.

Analysis of Greater Sydney's waste has demonstrated low percentages of PVC in both residual MSW and C&I waste[3]. Sampling demonstrated that PVC made up only 0.07% and 0.04% of residual MSW and C&I waste, respectively. By only accepting residual MSW and C&I at the WTTs, this strategy minimises the amount of material that is high in chlorine (such as PVC) entering the waste stream from the outset. Limiting the amount of chlorine in the initial accepted waste will assist in complying with the NSW EfW Policy's requirement for less than 1% of chlorine in the feedstock.

4.3 Stage 2 - Waste Transfer Terminals

Stage 2 is implemented at the Waste Transfer Terminals.

Non-conforming waste, as listed in Section 5.4, that is unsuitable for use as feedstock in the Woodlawn ARC is removed from the waste stream at the WTTs in accordance with Veolia's Waste Delivery Plan (WDP)[4]. This is the primary location for removing non-conforming waste and aims to minimise the amount of inappropriate material transported to the Woodlawn ARC. This is described in further detail in Section 5 below.

Periodically, sampling and auditing of the council MSW and C&I customer collections will take place at the WTT for contractual compliance and to determine the physical composition and adequacy of the residual MSW and C&I waste. This sampling is conducted in accordance with the Sampling, Analysis and Quality Plan[5] with the objective of ensuring that the waste received at the WTTs is residual MSW and C&I waste suitable for the Woodlawn ARC.

Waste delivery requirements will be communicated to customers. Collaboration with Councils' waste criteria will occur routinely and in response to non-conformances. This may involve participating in the development of targeted waste education programs. This is because the best opportunity for removal of contaminants is at the source and then secondly at the point of collection/aggregation.

4.4 Stage 3 - Woodlawn ARC

Stage 3 is implemented at the ARC.

Once the waste is tipped into the bunker there is a final opportunity to remove any unsuitable waste that may have made its way through the previous control points.

Annually, sampling of the Woodlawn ARC's feedstock will take place to assess both the physical and chemical composition of the waste, as well as the removal of non-conforming waste. Over time, should the results show consistency, the sampling frequency may be reduced, as agreed with the regulator.

[3] *00288-R-07-K00-0001 Waste Feedstock Assessment*

[4] *00288-Q-00-M00-0001 Waste Delivery Plan*

[5] *00288-Q-00-M00-0002 Sampling, Analysis and Quality Plan*

5 Waste Acceptance - Waste Transfer Terminals

5.1 Overview

The first and second stages of feedstock quality control occurs at the Clyde and Banksmeadow WTTs. The processing of waste at the WTTs is outlined in detail in the WDP.

The following process performed at each WTT will ensure that only conforming residual MSW and C&I waste is allocated as feedstock for the Woodlawn ARC:

- The mass of waste received from each council and C&I source is weighed and recorded, and an appropriate percentage, based on the respective council's level of source separation (refer to **Table 3-1**), is allocated to be treated by the Woodlawn ARC
- The WTTs demonstrate genuine resource recovery and only residual MSW and C&I waste is designated as feedstock for the Woodlawn ARC
- Non-conforming waste is removed from the Woodlawn ARC waste stream
- Preparation of waste, containerisation and rail transport

5.2 Woodlawn ARC Feedstock Allocation

The mass of waste received from each council and C&I source will be recorded to determine the allowable mass of residual waste to be treated by the Woodlawn ARC. This will depend on the level of source separation undertaken by each Council and the corresponding percentage of waste permitted to be treated in an EfW facility.

Upon entering each WTT, waste delivery trucks will proceed to the inbound weighbridge where the following details will be recorded and stored electronically:

- Truck ID and registration
- Timestamp
- Gross mass
- Waste type
- Originating facility or council

The delivery truck will then be directed to the appropriate tipping area where the waste load will be deposited for processing. The truck will be weighed again at the outbound weighbridge to determine the accepted mass of the load delivered and its exit time.

The details recorded for each waste delivery will be used to determine the allowable percentage of the waste that can be used as feedstock for the Woodlawn ARC (if any).

5.3 Resource Recovery

The NSW EfW Policy requires that feedstock for an ERF comprising mixed municipal waste (MSW) is sourced from a processing facility that receives source separated waste. Prior to arriving at the Woodlawn ARC, residual MSW and C&I waste is processed via Veolia's Clyde and Banksmeadow WTT's.

As demonstrated in **Section 3.1.3**, the waste received at Veolia's WTTs complies with the NSW EfW Policy. In addition, each WTT processes and sorts the incoming waste into the following waste streams, in order to maximise resource recovery:

- Removal of large and bulky items including mattresses and furniture

- Segregation of readily recyclable materials such as bricks, concrete and large metal objects
- Removal of household gas bottles and other pressure vessels
- Segregation of garden organics and/or FOGO for processing at the Woodlawn MBT

After the above waste streams are removed or segregated for recovery, a proportion of the remaining residual MSW and C&I waste will be eligible for use as feedstock for the Woodlawn ARC.

5.4 Non-Conforming Waste

As outlined in the WDP[6], quality control is undertaken as the waste is being processed for resource recovery at each WTT. The residual waste is inspected, as far as practicable, and any identified non-conforming waste is removed from the Woodlawn ARC waste stream. Non-conforming waste will be aggregated in a designated isolation area for further processing as required.

The Woodlawn ARC will be designed to receive all reasonably acceptable waste typically arising from residual MSW and C&I waste streams that are in accordance with relevant policies surrounding acceptance criteria. In practice, due to the heterogeneous nature of waste, there is potential for minor quantities of non-conforming waste to inadvertently be accepted into the ARC. The equipment design is consistent with the best available techniques and is capable of treating minor quantities of non-conforming waste.

Non-conforming waste shall be determined as the following items:

- Asbestos
- Explosives and ordnance
- Waste oil or grease
- Oil sludge
- Septic tank sludge
- Liquid wastes (mono loads)
- Machinery other that small household items
- Whole tyres
- Large batteries (e.g. car or industrial batteries)
- Hazardous chemicals and radioactive materials
- Bulk quantities of materials that contain high concentrations of chlorine (e.g. PVC, conduit, pool salt)
- Bulk quantities of materials that contain high concentrations of sulphur (e.g. plasterboard or “Gyprock”, plaster, fertiliser)
- Pathological and biological waste including human and animal remains
- Clinical waste
- Hazardous waste as defined in The Hazardous Waste (Regulation of Exports and Imports) Act 1989 regulations
- Dead animals whether domestic pets or wild animals
- Animal by-products
- Sewage
- Non-combustible construction materials and/or demolition debris, which may cause damage to the Plant or adversely affect operations
- Any article of combustible waste, solid pieces: sum of length, width and height of enveloping cuboid: < 1.8 m
- Any article of non-combustible waste, solid pieces: sum of length, width and height of enveloping cuboid: < 0.9 m
- Materials which may not be lawfully received at the site under the terms of the environmental operating permit or other consent regulating the Plant

[6] *00288-Q-00-M00-0001 Waste Delivery Plan*

5.5 Woodlawn ARC Feedstock

In summary the remaining waste consigned as feedstock to the Woodlawn ARC will comprise:

- Residual MSW that is not contracted to be processed at the MBT and is therefore otherwise destined for landfill. In compliance with the NSW EfW Policy this will comprise, as of 2021, no more than 25% by weight of the residual MSW processed at either transfer terminal, unless the Council has a GO or FOGO service, in which case 40% and 100% could be processed at the Woodlawn ARC, respectively.
- Residual C&I comprising no more than 50% of the C&I processed at each transfer terminal, in accordance with the NSW EfW Policy.

5.5.1 Anticipated Waste Composition

Based on waste composition audits conducted at the Banksmeadow Transfer Terminal and simulation of waste diversion efforts over the course of the project life, the anticipated waste feedstock composition is indicated below.

Waste Fuel Composition	Min	Max
	%	%
Organics	22.4	36.7
Paper/Cardboard	15.9	20.5
Cartons	0.3	0.4
Composite	0.7	1.0
Textiles	7.7	10.1
Nappies/Hygiene	7.2	10.4
Plastics - excl PVC	16.4	20.2
PVC	0.1	0.1
Combustible Material	0.7	1.1
Glass	1.6	2.4
Metals	1.8	2.2
Non Combustible/Inert	0.3	1.2
Ewaste	0.0	1.3
Other Hazardous	0.0	1.2
Fines	5.1	7.4
Other	1.2	1.6

5.6 Preparation of Waste, Containerisation and Rail Transport

Following quality control, waste is prepared for dispatch by compacting it prior to loading it into containers that are subsequently moved into the container dispatch area. Containers holding conforming residual waste are clearly identified with their end destination at the Woodlawn ARC.

In the event of a container being accidentally loaded with non-conforming waste, the container number is identified on the manifest. The container will be diverted to the Bioreactor Landfill.

Each container is transported by rail to the Crisps Creek IMF then by truck to the Woodlawn ARC.

5.7 Waste Auditing at the Waste Transfer Terminals

Waste sampling and auditing will occur at each WTT to assess the physical composition of the waste delivered by councils and C&I customers. This is undertaken for contractual compliance and to ensure that residual MSW and C&I waste suitable as feedstock to the Woodlawn ARC is accepted at the WTTs.

The checking and auditing process also enables any waste loads with higher impurities to be traced back to the origin of the waste which would help identify and rectify poor waste management practices.

5.7.1 Waste Delivery Sampling Process

A large sample comprised of waste from multiple collection vehicles (up to six) shall be tipped and mixed in a dedicated area of the WTT away from the operational area. The aggregate sample shall be approximately 2.5 tonnes. The large sample from several collection vehicles will provide a representative sample.

A third-party auditor shall assess the physical composition of the waste sample and identify any non-conforming waste. This will be used to determine contractual compliance and as feedback to the customer regarding the quality of the delivered waste with the aim of eliminating any non-conforming waste from the waste stream in future.

The detailed sampling and auditing procedure is outlined in the Sampling, Analysis and Quality Plan[7].

[7] *00288-Q-00-M00-0002 Sampling, Analysis and Quality Plan*

6 Waste Acceptance - Woodlawn ARC

6.1 Overview

The third stage of feedstock quality control is undertaken at the Woodlawn ARC to ensure that non-conforming waste that may have been missed at the WTTs is removed from the incoming waste stream. Implementing this process will assist the Woodlawn ARC to meet its legislative requirements and will help protect the health and safety of Veolia employees, while also minimising potential impact on the environment.

The two waste acceptance control points for waste delivered to the Woodlawn ARC are at the inbound Weighbridge and in the Waste Bunker, as described in detail in the WDP[8].

As part of the quality control process, periodic detailed sampling and monitoring of the waste received by the Woodlawn ARC is also undertaken to determine the physical and chemical composition of the feedstock.

6.2 Inbound Weighbridge

Upon entering the Woodlawn ARC, waste delivery trucks will report directly to the inbound weighbridge. The inbound weighbridge is unmanned with an automated system for recognising authorised vehicles and their loads being delivered. Access onto and off the weighbridge is controlled via boom gates, only allowing authorised vehicles verified via the automated system to enter the ARC. Any unauthorised vehicles will be denied access to the ARC and their delivery of waste refused.

Only authorised vehicles transporting conforming waste will be weighed and directed to the container marshalling area. Here, trucks will either unload their container for stacking on the container marshalling area or they may be directed to the tipping hall to directly deliver the waste into the Waste Bunker.

6.3 Waste Bunker

Full containers from the Container Marshalling Area will be periodically offloaded into the Waste Bunker via the tipping platforms in the Tipping Hall, 24 hours a day. When possible, grapple crane operators will observe the waste from the load as it is deposited into the Waste Bunker via cameras or by visual inspection from the Control Room overlooking the Bunker. If at any point, a large quantity of non-conforming waste is identified within the Waste Bunker, it shall be removed using the grapple crane and deposited through the reloading hopper on the west of the Waste Bunker, into a skip bin dedicated for this purpose.

When the skip bin is filled, the non-conforming waste shall be further sorted into the following streams:

- Waste suitable for the Bioreactor Landfill will be directed to the Landfill via its dedicated weighbridge
- Waste not suitable for the Bioreactor Landfill will be directed for further processing at another suitably licenced facility

If a container that was identified as containing non-conforming waste by one of the Transfer Terminals is deposited into the Waste Bunker, further waste will be prevented from being tipped into the immediate area by temporarily closing the Tipping Platform until the non-conforming waste is removed using the above method.

[8] *00288-Q-00-M00-0001 Waste Delivery Plan*

6.4 Waste Auditing at the Woodlawn ARC

Annual waste sampling and auditing will occur at the Woodlawn ARC to assess the feedstock's physical and chemical composition. The audit will compare the sample waste against the established waste feedstock composition to demonstrate its suitability for use as feedstock.

A third party auditor shall randomly select a waste container that has been delivered to the Woodlawn ARC Tipping Hall and is awaiting processing. This eliminates any suspicion that the operators at the WTTs would know of the audit and may do sorting above and beyond what they would do day-to-day. Once the container has been emptied into the Waste Bunker, the grapple crane shall be used to immediately take grab samples from the selected waste and deposit it into a dedicated sampling bin, until the requisite quantity is achieved. As the target mass of waste in each container is 31.5 tonnes, the load will be large enough to ensure that the grapple crane can easily take samples that are only from the selected container. The large sample size contained in the waste sample bin shall also allow for a more representative sample.

The sample bin shall be tipped in the Tipping Hall in a dedicated area away from the operational area. The auditor shall assess the physical composition of the waste and prepare samples to be sent to a NATA accredited laboratory for chemical analysis. This audit is for quality control purposes and for demonstration that the feedstock is of the correct composition. Feedback will also be provided to the WTTs, identifying any non-conforming waste with the aim of eliminating them from the waste stream in future.

The detailed waste sampling and auditing procedure is outlined in the Sampling, Analysis and Quality Plan[9].

[9] *00288-Q-00-M00-0002 Sampling, Analysis and Quality Plan*

VANZ

Woodlawn ARC Waste Delivery Plan

00288-Q-00-M00-0001

Issue Date: 4/10/22

Purpose	The purpose of this Waste Delivery Plan is to describe the process of waste delivery to the Woodlawn Advanced Energy Recovery Centre (ARC), from the point of delivery in Sydney to the point of delivery at the ARC waste bunker.

Scope	This plan is preliminary and applies to the Woodlawn ARC project only
Review Frequency	N/A

Contents

Revision History

Revision	Date	Document Status
A	13/10/2021	DRAFT issue
B	02/06/2022	FINAL issue
C	04/10/2022	Container information added

1. Waste Arrival at Transfer Terminals

Waste will be delivered to one of the following Waste Transfer Terminals (WTT) by contracted waste collection vehicles.

- Banksmeadow Transfer Terminal (BTT)

  Address: 14 Beauchamp Rd, Banksmeadow NSW 2019

- Clyde Transfer Terminal (CTT)

  Address: 322 Parramatta Rd Clyde NSW 2142.

2. Scheduling of Deliveries

Deliveries are permitted at the transfer terminals:

Day	Time
Monday - Sunday	24 hours

3. Process on Arrival

When a delivery vehicle arrives at the WTT, it will immediately proceed to the inbound weighbridge. Veolia shall record the gross weight of the delivery vehicle and will direct the delivery vehicle to the designated tipping area inside the building.

Once the delivery vehicle has tipped its load at the designated tipping area, it exits the WTT via the outbound weighbridge, and proceeds to the designated exit point out of the Transfer Terminal.

The difference of the actual gross weight (inbound weight) and the tare weight (outbound weight) of the delivery vehicle will be accepted as the weight of the load.

The weighbridges are appropriately licensed and calibrated for accuracy in accordance with applicable laws. The weighbridge records are saved and are linked to Veolia's existing weighbridge management system.

If the inbound weighbridge is unavailable, delivery vehicles will be temporarily routed via the outbound weighbridge, while the problem with the inbound weighbridge is being rectified (or vice versa).

4. Pretreatment, Compaction and Loading

As soon as practicable after the load has been tipped into the designated tipping area, the front end loader (FEL) operator will inspect the tipped load from the cab of the FEL.

Operators will identify as far as practicable any non-conforming waste within the load and isolate it by removing it from the load using the FEL bucket. Non-conforming waste will be aggregated in a designated isolation area within the tipping building.

The waste will be pushed into one of two designated compactor chutes. One chute will be for residual conforming waste to be sent to the ARC, the other chute will be for waste to be sent to other waste processing facilities within the Woodlawn Eco Precinct being the mechanical biological treatment (MBT) facility or the Bioreactor.

Some non-conforming wastes will not be suitable for delivery to the ARC, Bioreactor or MBT. This waste will not be compacted and will be segregated and removed from the WTT. Non-confroming wastes are defined in the Waste Acceptance Protocol.

The chutes are connected to the compactors which gradually compact a bale of waste that is then pushed into a specially constructed 40' container. The target net mass of waste is 31.5 tonnes per container. The mass of the bale of waste is monitored by load cells fitted to the compactor. Each container's mass is logged and the container number is noted. A container manifest is filled out identifying the timestamp, contents, mass and destination of each container for quality control purposes and to allow for identification as part of a rail manifest. The operators of the FEL and the Compactors are in constant radio communication with each other.

Full containers are decoupled from the compactor and moved to a container lifting zone, where a container handler lifts the container and moves it to a storage area or directly onto a freight train rail wagon.

The container handler then reloads an empty container and the process is repeated.

In the event of a container being over-mass, it is set to one side and an amount of waste is removed using a small skid steer loader, prior to the container being reweighed and reloaded .

In the event of a container being accidentally loaded with non-confroming waste, the operator of the FEL advises the Compactor operator and the container number is identified on the manifest and the non-conforming waste is removed once the container is tipped at the Eco Precinct.

5. Rail Delivery

Once the train is loaded with containers, it will leave the WTT at its scheduled time of departure. Trains travel from Sydney to the Crisps Creek Intermodal Facility (IMF), located south of the township of Tarago in regional NSW.

The IMF was constructed by Veolia for the specific purpose of transferring containers from the trains for onward delivery to the Woodlawn Eco Precinct (WEP). Containers are removed from the rail wagons using container handlers and are either temporarily stacked at the IMF or loaded directly onto trucks for transfer to the WEP.

Details of train times - departure from Sydney and arrival at IMF

Location	**Train Departure (Sydney)**	**Train Arrival (Crisps Creek IMF)**	**Number of containers on train (*)**
CTT	00:15 hrs	06:30 hrs	55
BTT	01:00 hrs	12:00 hrs	55

(*) There will be some variation to the number of containers from week to week. The numbers are an indication of typical train movements.

6. Transfer from IMF to Woodlawn Eco Precinct

Containers are delivered to the WEP on road via prime mover and skeleton semi-trailer combinations. Each combination is capable of carrying one loaded container at a time, with a total gross mass of 50.5 tonnes.

Trucks exit the IMF, turning left onto Bungendore Road, and then take a right turn onto Collector Road. The total distance from the IMF to the WEP is 8 kilometres and travel time is approximately 10 minutes.

Trucks carrying waste destined for the Advanced Energy Recovery Facility (ARC) will turn left from Collector Road prior to the main entrance to the WEP.

7. Delivery to the ARC

Trucks will proceed from the entrance to the ARC along a dedicated driveway. Traffic movement at the ARC is achieved in a clockwise direction. On entering the ARC, trucks will approach the inbound weighbridge. The inbound weighbridge is unmanned but with a system that recognises the load being delivered. The control onto and off the weighbridge is achieved with boom gates. Once weighed, the truck then proceeds towards the container marshalling area.

Full waste containers will be unloaded from the truck and stacked in the container marshalling area. Empty containers will be loaded onto the truck for transfer back to the IMF. Alternatively, trucks may be directed to the tipping hall for direct delivery of waste into the waste bunker.

Trucks carrying empty containers are directed to leave the site via the outbound weighbridge. The outbound weighbridge is unmanned but with a system that recognises the load that was delivered. The traffic control onto and off the weighbridge is achieved with boom gates. The difference between the actual gross weight (inbound weighbridge) and the tare weight (outbound weighbridge) of the truck will be accepted as the weight of the load.

The weighbridges are appropriately licensed and calibrated for accuracy in accordance with applicable Laws.

If the inbound weighbridge is unavailable, trucks will be temporarily routed via the outbound weighbridge, while the problem with the inbound weighbridge is being rectified. This requires the truck to make a clockwise loop of the site one way system to reach the outbound weighbridge.

Once weighed by the outbound weighbridge, trucks will proceed towards Collector road via the ARC driveway, turn right onto Collector road and proceed to the IMF, where the empty containers are removed and stacked to be loaded onto the train for delivery back to the WTT.

Details of train times - departure from IMF and arrival at Sydney

Destination	Train Departure (Crisps Creek IMF)	Train Arrival (Sydney)	Number of containers on train (*)
CTT	12:00 hrs	19:00 hrs	55
BTT	16:30 hrs	21:30 hrs	55

(*) There will be some variation to the number of containers from week to week. The numbers are an indication of typical train movements.

8. Tipping of Waste at the ARC

Throughout the day, full containers will be loaded onto a site based tug and trailer combination by the container handler for offloading of the waste via the tipping platforms in the tipping hall. The tug will reverse the trailer and container onto one of the two fixed tipping platforms, onto a dedicated position where the container door and pressure relief door will be manually opened. Once the doors have been secured, the truck will reverse to the end of the tipping platform. The tug will be disconnected and move away. The tipping platform will tip the trailer and container and the waste will slide out of the container into the waste bunker. The tug will then reattach to the trailer and tow the empty container towards a designated position for a manual closing of the container door and pressure relief door, following a drive back to the container marshalling area for offloading by the container handler.

Maximum requirement of waste for ARC	Equivalent number of containers
50 t/hour	1.5 containers/hour

Whilst there is a maximum requirement of 1.5 containers per hour, the bunker will be operated such that it holds several days' waste supply in order to provide redundancy for unforseen waste supply issues. Further redundancy is provided by the stacking of full containers in the container marshalling area.

The container marshalling area is designed to hold up to 90 containers in total. Under normal operation, there will be between 45 and 72 full containers stored in the container marshalling area, to account for fluctuations in waste deliveries at weekends or during maintenance of the rail line.

In the event of a maintenance shutdown of the ARC or similar situation, there will be the requirement to build up an inventory of waste ready for reestablishment of operations at the ARC. In this situation, it is anticipated that all 90 containers will be full. This assumes that the waste bunker will be emptied as much as possible at the time of shutdown, to reduce potential odour emissions. When operations are to be reestablished, there will be a requirement for waste feedstock, which will be stored outside of the bunker in the containers. In order to account for recommencement of operations prior to a weekend, up to 90 full containers will be required, which would provide about 2.5 days of feedstock.

In the rare event of a tipping platform being out of service, a further two tipping bays can be utilised via the temporary installation of a mobile tipping platform. The mobile tipping platform will be transported from the Bioreactor Landfill and installed in a spare bay. This operation will take two to three hours to complete.

9. Non-Conforming Wastes in the Bunker

On a rare occasion an operator may identify the presence of large quantities of non-conforming waste in the bunker. When this occurs, the waste will be removed by the operator, using the waste crane grapple. The non-conforming waste will be dropped through the reloading hopper on the west of the waste bunker, into a skip bin provided for this purpose. When the bin is full the waste will be directed to the Bioreactor Landfill via its dedicated weighbridge or other suitably licensed facility.

In practice, due to the heterogeneous nature of waste, there is potential for minor quantities of non-conforming materials to inadvertently be accepted into the ARC. The equipment design is consistent with the best available techniques and is capable of treating minor quantities of non-conforming materials.

10. Waste Supply During Maintenance of the ARC

Maintenance of the ARC will occur for two weeks annually. During this period the ARC will be unavailable. Prior to the planned maintenance shut down, waste held in the bunker will be reduced to the point that during the maintenance period there will be minimal waste in the bunker.

During the maintenance period, waste will be diverted to the Bioreactor and no deliveries of waste will take place at the ARC.

Prior to the ARC being brought back into service, waste will begin to be stockpiled in the bunker and the normal bunker operating levels will be reestablished.

11. Delivery Summary Information

Parameter	Unit	Value
Maximum waste received by train to the ARC	tonnes per year	380,000
40’ Waste Container net mass	tonnes	31.5
Deliveries by train (Monday to Saturday)	trains per day	2
Train operating hours (unload fulls / load empties)	hours	06:00-17:00
Daily 40’ containers delivered	number	55x2 = 110
Number of containers emptied by tipping platform per hour	number	5
Number of fixed tipping platforms	number	2
Nominal waste delivered into bunker per hour	tonnes per hour	158x2 = 316
Nominal ARC waste requirement	tonnes per day	1,140
Nominal ARC waste requirement	containers per day	36
Max ARC waste requirement	containers per day	40
Nominal ARC waste requirement	tonnes per hour	47.5
Nominal ARC waste requirement	containers per hour	1.5

12. Manifest Example

CLYDE TRANSFER TERMINAL

RAIL LOAD MANIFEST

TRAIN DEPATURE DATE:	12.10.2021
TRAIN DEPATURE TIME:	0:30
TRAIN NOTIFICATION TIME:	20:45
TRAIN ARRIVAL TIME:	NA

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NO	PACKING DATE	CONTAINER ID	CONTAINER PAYLOAD (T)	CONTAINER TARE (T)	CONTAINER GROSS (T)	CONTAINER DESTINATION	YARD STORAGE OPERATOR	COMPACTOR NUMBER	OPERATOR	WAGON ID	
1	11.10.21	545	30.142	4.8	34.94	WOODLWN	JASON		JASON	NQHX	22169E
2	11.10.21	306	30.331	4.8	35.13	WOODLWN	JASON		JASON	NQIX	14844C
3	11.10.21	666	30.265	4.8	35.07	WOODLWN	JASON		JASON	NQIY	10169R
4	11.10.21	671	30.946	4.8	35.75	WOODLWN	JASON		JASON	NQIY	10183C
5	11.10.21	318	29.991	4.8	34.79	WOODLWN	JASON		JASON	NQHX	22159T
6	11.10.21	22	26.314	4.8	31.11	WOODLWN	JASON		JASON	NQIX	14831N
7	11.10.21	387	30.089	4.8	34.89	WOODLWN	JASON		JASON	NQIY	10176V
8	11.10.21	367	30.444	4.8	35.24	WOODLWN	JASON		JASON	NQHX	14484D
9	11.10.21	678	28.540	4.8	33.34	WOODLWN	JASON		JASON	NQIY	10199S
10	11.10.21	332	25.800	4.8	30.60	WOODLWN	JASON		JASON	NQHX	14476N
11	11.10.21	202	25.410	4.8	30.21	WOODLWN	JASON		JASON	NQIX	14540Y
12	11.10.21	402	30.717	4.8	35.52	WOODLWN	JASON		JASON	NQIY	10152P
13	11.10.21	532	30.213	4.8	35.01	MBT-SSROC	JASON		JASON	NQIY	10171W
14	11.10.21	613	30.417	4.8	35.22	WOODLWN	JASON		JASON	NQIY	10193K
15	11.10.21	307	30.233	4.8	35.03	WOODLWN	JASON		JASON	NQIX	14524L
16	11.10.21	505	30.724	4.8	35.52	WOODLWN	JASON		JASON	NQHX	14821C
17	11.10.21	250	29.663	4.8	34.46	MBT-SSROC	JASON		JASON	NQIY	10162A
18	11.10.21	417	29.937	4.8	34.74	WOODLWN	JASON		JASON	NQHX	22155G
19	11.10.21	637	30.059	4.8	34.86	WOODLWN	JASON		JASON	NQHX	14494L
20	11.10.21	356	30.355	4.8	35.16	WOODLWN	JASON		JASON	NQIX	14842H

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Woodlawn ARC Sampling, Analysis and Quality Plan

00288-Q-00-M00-0002

Issue Date: 16/02/22

Purpose	The purpose of this Sampling, Analysis and Quality Plan (SAQP) is to describe the process of waste auditing at the Woodlawn Advanced Energy Recovery Centre (ARC), and Sydney Waste Transfer Terminals, to ascertain waste composition and characteristics for contractual, operational and quality purposes.

Scope	This plan is preliminary and applies to the Woodlawn ARC project only
Review Frequency	N/A

Contents

Revision History

Revision	Date	Document Status
A	16/02/2022	FINAL issue

1. Introduction

Waste audits shall be conducted to characterise the residual waste for two purposes:

1. Auditing for customer contractual purposes (i.e. checking council waste for composition and compliance).
2. Auditing for feedstock composition (i.e. checking that waste intended for use as fuel at the ARC has been presorted correctly).

In both cases, third party Auditor services shall be employed, to provide a level of independence. Laboratories used for chemical analysis shall be NATA accredited.

2. Auditing for Customer Contractual Purposes

This audit shall be conducted at a Sydney Waste Transfer Terminal (WTT). The audit will assess the residual waste arising from a Municipal Solid Waste (MSW) kerbside or Commercial and Industrial (C&I) customer collection. The residual waste shall be sorted for all waste types, whether they meet the acceptance criteria of the ARC or not. This will identify any non-conforming waste and provide evidence for feedback to the council or commercial customer. This audit is focussed on composition only and lab testing is not required.

2.1. Waste Sampling

The residual waste being transported between four and six waste collection vehicles will be tipped in a demarcated safe area in the transfer terminal away from the operational area. One sample of approximately 400-600 kg shall be taken from each waste collection vehicle. The samples shall total approximately 2.5 tonnes.

Photos shall be taken of all waste that makes up the aggregate sample. Details of each truck delivery shall be recorded in the waste delivery log sheet.

The waste is mixed using a front end loader and is cone and quartered into a pile of around 500 kg. The remaining waste is discarded.

- The 500 kg sample is sieved into particle sizes of >100 mm, 20-100 mm and <20 mm (fines).
- The >100 mm fraction is weighed then divided into 21 categories (see Section 4).
- The 20-100 mm fraction is cone and quartered to the same mass (not less than 100 kg) as the >100 mm fraction and divided into 21 categories.
- The <20 mm (fines) are not sorted.

All category weights are logged by the Auditor in the audit datasheet. There are 21 categories of individual waste types and an unsorted single category of fines, resulting in 22 categories overall.

2.2. Analysis and Feedback to Customer

The Auditor shall prepare a report that contains as a minimum:

- An outline of the audit method;
- photos of the waste samples;
- tabulated results; and
- a statistical analysis (if required).

Veolia shall: provide details to the customer of any non-conforming wastes identified in the waste stream to seek reassurance from the customer on how these non-conforming waste occured, and how they can be managed or eliminated from the waste stream.

3. Auditing for Feedstock Composition

This audit shall be conducted at the ARC. The audit will assess the waste presented for processing at the ARC against the established waste fuel composition. This audit is for quality control purposes and for demonstration that the fuel is of the correct composition. It eliminates the chance that an operator at the WTT could anticipate the audited container and conduct sorting above and beyond what they would do day-to-day, since the container is randomly selected at the ARC. This audit is focussed on physical and chemical composition and lab testing is required.

On the day of the audit, the auditor will select a container at random at the time the container is tipped into the waste bunker at the ARC. Once tipped, the grapple crane operator shall immediately take a grab from the tipped load in the bunker, backloading via the backloading hopper into an open topped bin.

The waste shall be audited in the tipping hall in a dedicated area of sufficient space where it can be done safely.

3.1. Waste Sampling

The bin containing the waste sample shall be tipped in a demarcated safe area in the tipping hall away from the operational area.

The waste is mixed using a front end loader and is cone and quartered into a pile of around 500 kg. The remaining waste is discarded.

- The 500 kg sample is sieved into particle sizes of >100 mm, 20-100 mm and <20 mm (fines).
- The >100 mm fraction is weighed then divided into 21 categories (see Section 4).
- The 20-100 mm fraction is cone and quartered to the same mass (not less than 100 kg) as the >100 mm fraction and divided into 21 categories.
- A 5-10 kg representative sample of each category is made up of the two larger fractions, bagged and marked with the date, time and waste type.
- The fines are cone and quartered to 10 kg and bagged and marked with the date, time and waste type.

Samples are sent to a NATA accredited lab for analysis.
All category weights are logged by the Auditor in the audit datasheet. There are 21 categories of individual waste types and an unsorted single category of fines, resulting in 22 categories overall.

3.2. Laboratory Preparation and Analysis

Sample preparation

Samples are dried at 40/105°C to ascertain the moisture content of the waste. A small sample shall be prepared in a way that retains it as a representative sample. Typically, this entails a process of sequential shredding to a smaller particle size, mixing and then coning and quartering to create a smaller subsample. This may then be further shredded, mixed and subsampled to create the final sample for analysis. Some materials are problematic to shred, e.g. shredding generates heat and this may cause plastics to melt and clog shredding equipment. The heat can also cause volatile losses such as Mercury (Hg) so measures shall be employed to prevent losses.

Some materials e.g. glass, metals and stones shall not be analysed as shredding and grinding would damage the equipment. These materials are tested for moisture content only.

Analysis of individual fractions

Analysis of individual sorted fractions is carried out. The results shall be used to predict whole waste composition, including the possible impacts of potential changes in the composition of the waste.

Analysis shall be limited in the first instance to the key parameters such as moisture/dry matter, ash/organic matter, Calorific Value (CV), Chlorine (Cl), Sulphur (S), Carbon (C), Hydrogen (H), Oxygen (O), and Nitrogen (N).

The preparation of samples for these analysis parameters results in the generation of dried ground material which should be stored in cool conditions for a predetermined time so they can be analysed later for other parameters if they are seen as important. This avoids taking new samples.

3.3. Analysis and Feedback to Customer

The Auditor shall prepare a report that contains as a minimum:

- An outline of the audit method;
- photos of the waste samples;
- Tabulated composition and laboratory analysis results; and
- a statistical analysis (if required).

Veolia shall compare the results of the audit with the waste fuel composition and establish if any divergences from the expected composition are of concern.

Veolia shall provide details to the waste transfer terminal Manager of any non-conforming wastes identified in the waste stream, and shall establish controls to manage or eliminate the non-conrming waste from the waste stream.

4. Waste Composition Categories

Details of waste categories and target sample mass for laboratory analysis if applicable.

Lab Sample Sizes	Nominally	kg
Organics	Approx 5-10 kg	10
Recyclable Paper	Approx 5-10 kg	10
Recyclable Cardboard	Approx 5-10 kg	10
Other Paper & Cardboard	Approx 5-10 kg	10
Cartons	Approx 5-10 kg	10
Composite	Approx 5-10 kg	10
Textiles	Approx 5-10 kg	10
Nappies/Hygiene	Approx 5 kg	5
Plastics- PET	Approx 5 kg	5
Plastics- HDPE	Approx 5 kg	5
Plastics- PVC	Approx 5 kg	5
Plastics - Film	Approx 5 kg	5
Plastics - Other	Approx 5-10 kg	10
Combustible Material	Approx 5-10 kg	10
Glass	Approx 5 kg	5
Metals - Ferrous	Approx 5 kg	5
Metals - Non Ferrous	Approx 5 kg	5
Non Combustible/Inert	Approx 5 kg	5
E-waste	Approx 5-10 kg	10
Other Hazardous	Approx 5 kg	5
Fines	Approx 5-10 kg	10
Other (specify)	Approx 5-10 kg	10
TOTAL		**170.0**

5. Example of Waste Delivery Log Sheet

DAY/DATE	Sample type (MSW / C&I)	Council or customer	Sample number	Rego number	Time at weighbridge	Overall Truck weight	Payload	Truck Tare
EXAMPLES	*MSW*	*XXX*	*1*	*H7tt8*	*09.00*			
Monday 7/6	*MSW*	*XXX*	*1*	*6Gtd9*	*10.00*			
Monday 7/6	*MSW*	*XXX*	*2*	*77ht0*	*11.25*			
Tues 15/6	*C&I*	*XXX*	*1*	*GGr56*	*06.40*			
Tuesday 8/6								
Tuesday 8/6								
Tuesday 8/6								
Tuesday 8/6								
Tuesday 8/6								
Wednesday 9/6								
Wednesday 9/6								
Wednesday 9/6								
Wednesday 9/6								
Wednesday 9/6								
Thursday 10/6								
Thursday 10/6								
Thursday 10/6								
Thursday 10/6								

6. Example of Audit Datasheet

DATA SHEET - RESIDUAL WASTE AUDIT											
Sample No:	1				2				3		
Date:											
Sample Weight:											
>100mm											
20mm to 100mm											
<20mm weight											
Rounding											
Category	>100mm		20mm to 100mm		>100mm		20mm to 100mm		>100mm		20mm t
Sorted weights											
Rounding	0.0 kgs		0.0 kgs		0.0 kgs		0.0 kgs		0.0 kgs		0.0
Organics	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Recyclable Paper	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Recyclable Cardboard	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Other Paper & Cardboard	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Cartons	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Composite	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Textiles	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Nappies/Hygiene	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Plastics- PET	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Plastics- HDPE	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Plastics- PVC	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Plastics - Film	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Plastics - Other	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Combustible Material	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Glass	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Metals - Ferrous	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Metals - Non Ferrous	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Non Combustable/Inert	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Ewaste	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Other Hazardous	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Fines	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
Other (specify)	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00	0.00%	0.00
TOTAL	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0	0%	0.0
Comments											