

**WASTE MANAGEMENT REPORT FOR  
PROPOSED RESOURCE RECOVERY FACILITY  
344 PARK ROAD, WALLACIA**

**Prepared for:** Greenfields Resource Recovery Facility  
Department of Planning, Industry and Environment  
NSW Environment Protection Authority  
Penrith City Council

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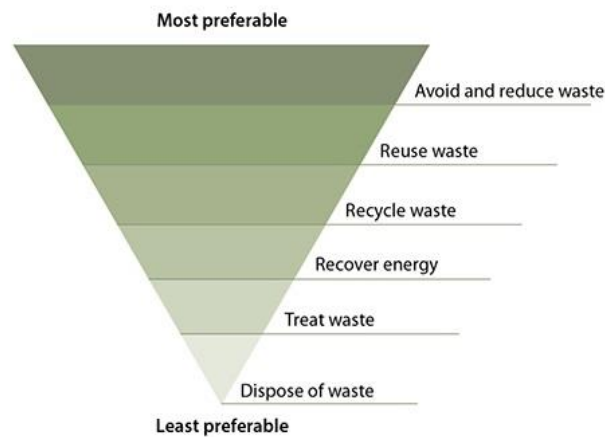
Attachment 1: Development Applications
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## 1. INTRODUCTION

This Waste Management Report documents the waste types received, processed and stored at the proposed Resource Recovery Facility located at 344 Park Road Wallacia in NSW. Procedures for managing the waste at the facility are also described and how the facility will adhere to relevant waste legislation. The report accompanies the Environmental Impact Statement (EIS) prepared by Benbow Environmental Ref: 191318\_EIS that supports the development application for establishment of the business at the site.

Waste management at the site would be undertaken in line with the waste hierarchy demonstrated in the following diagram:



### 1.1 SCOPE

Secretary's Environmental Assessment Requirements (SEAR) 1227 were issued on 5 June 2018. Requirements specific to waste management were provided by the Department of Planning and The NSW Environment Protection Authority. These requirements are listed in the following table and form the scope of this report.

Table 1-1: SEARs

Requirement	Comment / Section
<b>Department of Planning</b>	
Waste management – including:	
<ul style="list-style-type: none"><li>Details of the type, quantity and classification of waste to be received at the site;</li></ul>	Sections 2.2 and 4.2
<ul style="list-style-type: none"><li>Details of the resource outputs and any additional processes for residual waste;</li></ul>	Section 4.2
<ul style="list-style-type: none"><li>Details of waste handling including, transport, identification, receipt, stockpiling and quality control;</li></ul>	Sections 4.6, 4.7, 4.8 and 5
<ul style="list-style-type: none"><li>Details of the machinery and waste processing to be used; and</li></ul>	Section 2.1



Requirement	Comment / Section
<ul style="list-style-type: none"> <li>The measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the <i>NSW Waste Avoidance and Resource Recovery Strategy 2014-21</i>.</li> </ul>	Section 3.3
<b>NSW EPA</b>	
<b>2. Waste Management</b> – the environmental impact statement (EIS) must include a detailed assessment of the waste management processes to be undertaken at the Premises. This includes but is not limited to:	
<ul style="list-style-type: none"> <li>details of the sources of waste to be received at the Premises;</li> </ul>	Section 2.1.4
<ul style="list-style-type: none"> <li>details of the types and quantities of each type of waste to be received at the Premises;</li> </ul>	Sections 2.2 and 4.2
<ul style="list-style-type: none"> <li>details of the maximum volume of waste to be stored on the Premises at any one time;</li> </ul>	Section 2.1.2
<ul style="list-style-type: none"> <li>details of the maximum annual throughput of waste for be processed at the Premises;</li> </ul>	Section 2.1.1
<ul style="list-style-type: none"> <li>a description of waste processing procedures for each waste type;</li> </ul>	Section 2.1
<ul style="list-style-type: none"> <li>the PEA indicates that the proposal will trigger the scheduled activities of resource recovery and waste processing. The EPA is unable to issue a licence for both these activities simultaneously.</li> </ul>	An EPL is needed for resource recovery (not waste processing) and waste storage as detailed in Section 3.1.
<ul style="list-style-type: none"> <li>Resource recovery applies to activities which dispose of less than 50% of waste after processing, while waste processing applies to activities that dispose of more than 50% of waste after processing;</li> </ul>	The activity is defined as resource recovery.
<ul style="list-style-type: none"> <li>a description of how the proponent will meet the EPA's record keeping and reporting requirements, including weighing material in and out of the Premises (refer to the EPA's Waste Levy Guidelines for more information – available at <a href="http://www.epa.nsw.gov.au/your-environment/waste/waste-levy">http://www.epa.nsw.gov.au/your-environment/waste/waste-levy</a>;</li> </ul>	Section 4.10
<ul style="list-style-type: none"> <li>a detailed site plan(s) identifying areas for: <ul style="list-style-type: none"> <li>haulage;</li> <li>waste receipt, processing, storage and loading (for each waste type)</li> <li>quarantine;</li> <li>infrastructure for environmental controls including dust, noise, water and wheelwash;</li> <li>weighbridge;</li> <li>site boundaries;</li> <li>stormwater drainage areas; and</li> <li>unused stabilised areas;</li> </ul> </li> </ul>	Site plans are provided with the development application.
<ul style="list-style-type: none"> <li>details of the type and quantities of materials to be produced and their intended fate;</li> </ul>	Section 4.2



Requirement	Comment / Section
<ul style="list-style-type: none"> <li>details of any materials produced under a Resource Recovery Order, and the controls in place for meeting the conditions of that order; and</li> </ul>	<p>The Recovered Aggregate Order 2014</p> <p>Section 3.2 and 4.9.2.1</p>
<ul style="list-style-type: none"> <li>a description of procedures for dealing with non-conforming waste (i.e. waste not permitted to be received at the Premises).</li> </ul>	Section 5
<p>It is noted that the Proponent wishes to accept both VENM and building &amp; demolition waste to the Premises. The Proponent is reminded that VENM certificates must be retained for all loads of VENM received at the site.</p> <p>It is noted that the Proponent stated that less than 10% of the waste received at site will be building and demolition waste. The Proponent should be aware that the EPA will formalise this as a condition of an Environment Protection Licence, should it be issued for this proposal.</p>	<p>VENM will not be accepted at the site.</p> <p>Incoming waste to be received at the site includes C&amp;D and C&amp;I waste and is detailed in Section 2.2</p>
<p><b>3. Waste types</b> – the EPA requires detailed information on the waste types proposed to be received at the Premises. For each waste type the Proponent must detail the physical and chemical content of the waste, the types of pollution which may result from the storage and processing of that waste and mitigation measures for managing any such impacts. The list of waste types to be received at the Premises must be made clear.</p>	Section 2.2
<p>Please note that the EPA will not consider including the following waste types on the licence:</p> <ul style="list-style-type: none"> <li>Excavated Natural Material or other wastes listed under a resource recovery exemption –resource recovery exemptions apply to the application of waste to land. It is not appropriate to list these on an environment protection licence.</li> <li>General Solid Waste (Non-putrescible) – this classification is too broad. The applicant must specify which types of General Solid Waste it proposes to receive at the Premises.</li> </ul>	ENM would not be received at the premises.

Since the issue of the SEARs, details of the proposed development have changed. The main modifications include the following:

- Establishment of a building to enclose the resource recovery facility;
- The majority of recovered materials would be stored within the building. External covered concrete walled storage bunkers would be used to store recovered aggregates.
- Waste accepted at the site will now include approximately 70% C&D and 30% C&I waste and will not include ENM and VENM.

Details of the proposed development are provided in the following section.





## 2. PROPOSED DEVELOPMENT

The initial design of the proposed facility was for establishment of mobile crushing and screening equipment and stockpiled materials. As part of the consultation process, feedback from the NSW EPA indicated that external activities would not be approved. Therefore, redesign of the development lead to the current proposal which includes a Resource Recovery and Transfer Facility (RRTF) enclosed within a building. The majority of materials would also be stored inside the building with the exception of some large aggregate materials.

The proposal involves the construction of a purpose-built building to house the resource recovery facility and development of internal access driveway, car park, hardstand areas on the north eastern portion of the site. The existing dwelling will be converted into a site office and a weighbridge would be provided on the access driveway from Park Road.

The facility would operate 24 hours 7 days a week and accept up to 95,000 tonnes per year of C&D and C&I waste mainly from the local and Sydney metropolitan area. This waste would be processed to generate a range of materials mainly for use in the construction industry and civil works. Due to the quantity of waste to be processed and stored, the facility will require an Environment Protection Licence.

The proposed facility is ideally located, being 10km from the Western Sydney Airport and in close proximity to the associated infrastructure projects required to establish growth centres in Western and Southern Sydney.

The waste accepted would consist of C&D and C&I waste, classified as "General Solid Waste (Non-putrescible) under the *NSW Waste Classification Guidelines*. The recyclable material would be made up of:

Construction & Demolition (C&D)	Commercial & Industrial (C&I)
<ul style="list-style-type: none"><li>■ Wood</li><li>■ Gyprock – plaster board</li><li>■ Concrete</li><li>■ Brick</li><li>■ Aggregates</li><li>■ Asphalt</li><li>■ Steel</li></ul>	<ul style="list-style-type: none"><li>■ Cardboard</li><li>■ Paper</li><li>■ Plastic</li><li>■ Steel</li><li>■ Aluminium</li><li>■ Wood</li></ul>

### 2.1 PROCESS DESCRIPTION

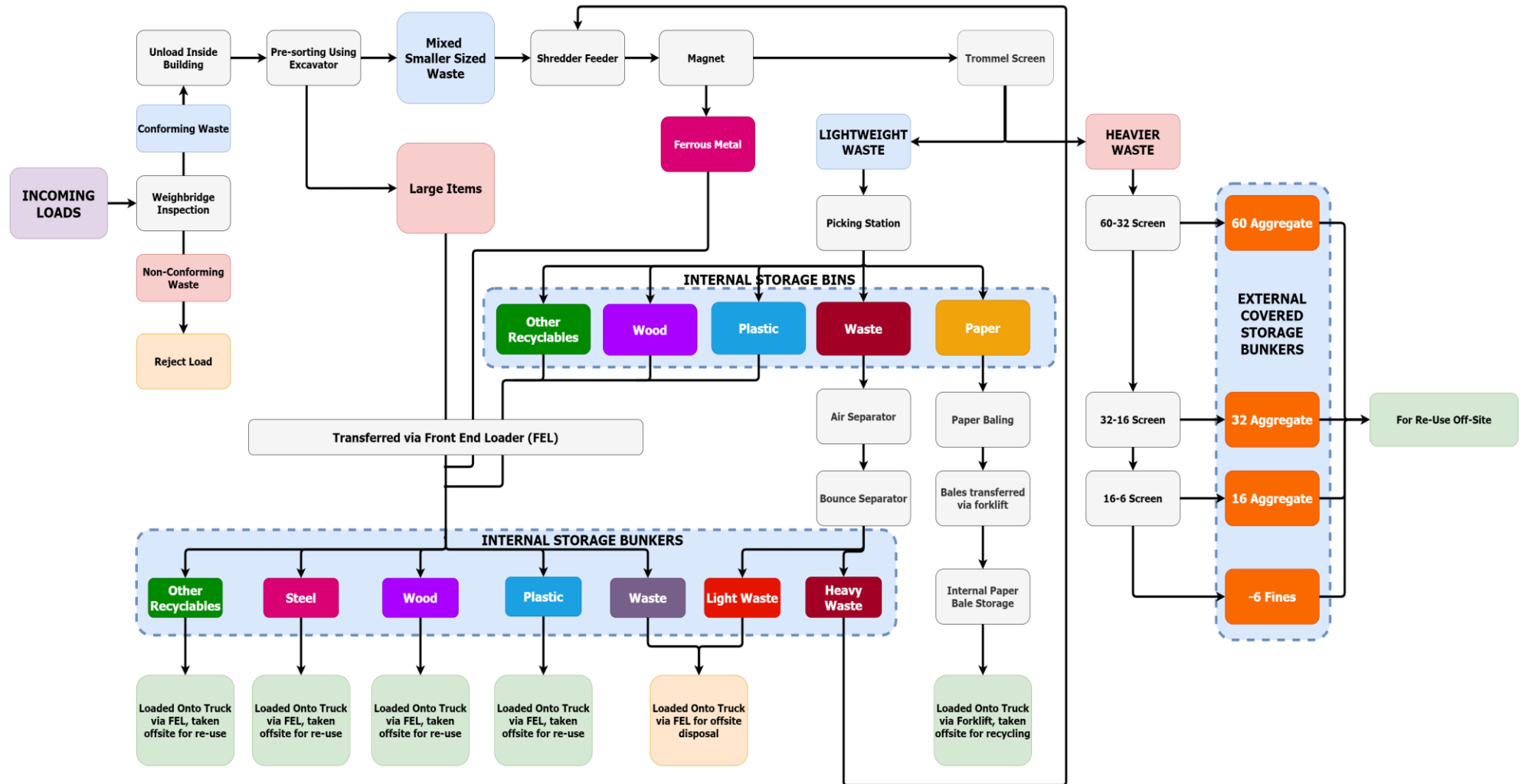
The plant will be designed to process 95,000 tonnes of C&D and C&I waste materials collected from various businesses across the local and metropolitan Sydney area. The materials will be sorted through the plant in separate runs, the C&I and C&D will not be mixed, this will ensure maximum recovery of recyclables. To achieve this, the C&D waste would be processed during the day shift and the C&I waste would be processed during the afternoon shift. The following provides the typical steps involved in the day time process that would be undertaken at the facility. Figure 2-1 provides a process flow diagram.



1. All trucks arriving at the site would be directed over the weighbridge and inspected for any abnormal contamination;
2. Trucks with conforming loads would be weighed on the weighbridge then directed inside the building. Non-conforming loads would be turned away via the turning bay adjacent to the weighbridge.
3. Loads of C&I material would be unloaded in a designated storage bunker for processing during the night shift. Loads of C&D material to be unloaded in the pre-sorting area inside the building for initial separation;
4. A front end loader would transfer the pre-sorted material to the infeed hopper / shredder at the start of the process or to the appropriate storage bunker.
5. The material would be fed into the system and conveyed to an electrical magnet for the removal of steel. Any ferrous material would be separated at this point and fall into a storage bin.
6. The waste stream would then be conveyed through a waste screen where aggregates would be removed and further screened into varying sizes and then directed to external storage bunkers via the conveyor system.
7. The waste stream would be directed to the manual picking station where it is separated into paper/cardboard, wood, plastic and other waste. Paper and cardboard is transferred to the paper baling area for baling. Bales are stored in a designated area within the building.
8. The remaining waste stream is conveyed where it is further separated into heavy and light wastes.
9. Recovered waste would be loaded into trucks for transport to various facilities for reuse or further processing.

No retail sales will be made on site. There will be no public access to the premises.

Figure 2-1: Process flow diagram





### **2.1.1 Maximum Throughput**

The maximum throughput would be up to 95,000 tonnes of waste per year.

### **2.1.2 Maximum Storage Capacity**

The facility would have the capacity to store up to a maximum of 9,000 tonnes of waste at any one time within storage bays and an internal incoming material stockpile.

### **2.1.3 Equipment**

Equipment and machinery required for the resource recovery facility includes:

- 2 x weighbridges;
- Resource Recovery and Transfer Facility (RRTF) consisting of control room, shredder, infeed hopper, conveyor belt, ferrous magnet, waste screens, picking station, air separator and bounce separator;
- Paper Baler;
- 30T Excavator;
- 20T Excavator;
- 35T Front end loader;
- Forklifts;
- Water misting system for the building and awning areas;
- Internal storage bunkers;
- External covered storage bunkers.

### **2.1.4 Incoming Waste**

Incoming waste would be sourced from reputable construction and demolition companies undertaking work in the regional area. Waste would also be accepted from commercial and industrial premises.

### **2.1.5 Recovered Materials**

The recovered materials generated include wood, plastic, scrap metal, paper & cardboard and aggregates. Recovered aggregates would be sent off site for application to land under the recovered aggregates order and exemption. The other recovered material would be sent on for further processing at licensed recycling facilities.

Any non-recyclable waste would be sent to landfill.

## **2.2 WASTE STREAMS & TYPES**

Waste streams and types are defined under the NSW Waste Levy Guidelines.

Two waste streams would be accepted at the facility and these include:

1. Commercial and Industrial (C&I) waste; and
2. Construction and Demolition (C&D) waste.



Waste Types accepted at the site would generally include: MIX – Mixed waste which would be a combination of the following:

- AGG – Aggregate, road base or ballast
- AL – Aluminium (non-ferrous)
- ASPH – Asphalt
- BC – Bricks or concrete
- CER – Ceramics, tiles, pottery
- COMM – Comingled recyclables
- FE – Ferrous (iron or steel)
- NFE – Non-ferrous (metals, not iron steel or aluminium)
- PAPER – Paper or cardboard
- PB – Plasterboard
- PL – Plastic
- WOOD – Wood, trees or timber



### 3. LEGAL AND OTHER REQUIREMENTS

#### 3.1 PROTECTION OF THE ENVIRONMENT OPERATIONS ACT 1997

The *Protection of the Environment Operations Act 1997* (POEO Act) is the principal environmental protection legislation for NSW. It defines 'waste' for regulatory purposes and establishes management and licensing requirements for waste. It defines offences relating to waste and sets penalties.

Part 1 in Schedule 1 of the POEO Act lists premise-based activities that are scheduled activities and, as such, that require a licence under the Act. The development falls under the definition of resource recovery (recovery of general waste) and waste storage as defined by clause 34 and 42 respectively.

##### **34 Resource recovery**

*"recovery of general waste", meaning the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and its processing, otherwise than for the recovery of energy.*

##### Comment:

Under Clause 34, the proposed development is a scheduled activity under 34(3) as it meets the criteria in column 2 of the table (being storage of more than 1,000 tonnes of waste on site at any one time and processing more than 6,000 tonnes of waste per year) and less than 50% by weight of the waste received in any year would require disposal after processing.

##### **42 Waste storage**

*"waste storage", meaning the receiving from off site and storing (including storage for transfer) of waste.*

##### Comment:

Under Clause 42, the proposed development is a scheduled activity under 42(3)(c)(i) and 42(3)(d)(i) as it is located in a regulated area and would store more than 1,000 tonnes at the premises at any one time and would receive more than 6,000 tonnes of waste per year from off site.

Therefore an Environment Protection Licence (EPL) is required for 34 – resource recovery and 42 – waste storage.

#### 3.2 PROTECTION OF THE ENVIRONMENT OPERATIONS (WASTE) REGULATION 2014

The *Protection of the Environment Operations (Waste) Regulation 2014*, referred to as the 'Waste Regulation', identifies provisions relating to waste management and disposal. Part 4 of the *Waste Regulation* details the requirements associated with tracking waste. Certain types of waste listed in Schedule 1 of the Waste Regulation have the potential to be harmful to the environment and are required to be tracked from the source to the waste disposal facility. The development would not generate, receive, handle or process waste types that require tracking



under the Waste Regulation. A procedure outlined in Section 5 demonstrates how the facility deals with waste of this nature should it be found within the incoming material.

Of relevance to the facility is Part 6 – Miscellaneous including general requirements relating to the transportation of waste. These requirements have been identified in Section 4.8.

Clause 112 – Requirements relating to the storage of waste generally

*A person who stores waste on premises (whether or not the waste was produced on the premises) must ensure that it is stored in an environmentally safe manner.*

The facility will need to comply with the above requirements.

Resource recovery orders (RRO) issued under the Regulation may apply in cases where the recovered material needs to meet certain requirements to be supplied for application to land. Relevant RROs include:

- The recovered aggregate order 2014

Controls to be put in place for meeting the conditions of this order are addressed in Section 4.9.2.1.

### **3.3 WASTE AVOIDANCE AND RESOURCE RECOVERY ACT 2001**

The *Waste Avoidance and Resource Recovery Act 2001* (WARR Act) promotes waste avoidance and resource recovery to achieve a continual reduction in waste generation. Among other miscellaneous provisions, the WARR Act sets out provisions for waste strategies and programs, and industry actions for waste reduction.

Waste minimisation and resource recovery would be practised as part of the main goals of the facility. Resource recovery practices implemented at the site are in accordance with the primary goal of the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021*, which is “to enable all of the NSW community to improve environment and community well-being by reducing the environmental impact of waste and using resources more efficiently.” Overall, the proposed development would have an important positive impact on the waste management practices in the local region since it enables the recovery and recycling of predominant waste streams, which could otherwise be sent to landfill.

The company would also follow the NSW EPA’s hierarchy of waste management for the management of wastes generated as a result of its ongoing operations.

### **3.4 PENRITH DEVELOPMENT CONTROL PLAN 2014 – C5 WASTE MANAGEMENT**

Part C5 of the Penrith Development Control Plan 2014 relates to waste management. Requirements relevant to the proposed development are addressed in the following table.



Table 3-1: Requirements of Part C5 Waste Management under Penrith DCP

Clause	Requirement	Comment
5.1	Waste Management Plan	A waste management plan is required and is provided as Attachment 1.
5.2	Specific Controls 5.2.4 Non-residential development controls 3) waste storage and collection areas should be:	Clauses 3, 8, 9 and 10 apply under 5.2.4
	a) Flexible in their design so as to allow for future changes in the operation, tenancies and uses	Complies.
	b) Located away from primary street frontages, where applicable	Complies.
	c) Suitably screened from public areas so as to reduce the impacts of noise, odour and visual amenity	Complies.
	d) Designed and located to consider possible traffic hazards (pedestrian/vehicular) likely to be caused by the storage and collection of waste	Complies.
	8) Should a collection vehicle be required to enter the property, the driveway and manoeuvring area must be suitable for a collection vehicle in terms of both its strength and design.	Complies. Shown in the Traffic impact assessment provided with the development application.
	9) The system for waste management must be compatible with the collection service(s) to be used whether Council or private contractor	Private contractors would be used.
	10) Swept paths demonstrating adequate manoeuvring area are to be provided with the application	Complies. Swept paths are provided with the application.
5.3	General Controls	Relevant clauses include 5.3.1, 5.3.2 and 5.3.3.
	5.3.1 Site Management 1) Proposals involving demolition and/or construction (including earthworks) are to include a Waste Management Plan	A Waste Management Plan is provided as Attachment 1. Demolition is minor and involves only one small shed. Excavation is minor. Construction waste would be processed in the facility on site.
	5.3.2 Selection of Building Materials	Complies. Materials to be used on construction consist of materials included in Table C5.1. Unsustainable imported timber would be avoided.





Clause	Requirement	Comment
	5.3.3 Designing for waste minimisation The design of developments should incorporate principles on how waste can be minimised in the design.	The design of the development would incorporate the following: <ul style="list-style-type: none"> <li>• Minimise excavation and fill</li> <li>• Use prefabricated frames, trusses and cladding</li> <li>• Use standard sizes</li> <li>• Materials used will not require finishes</li> <li>• Wet areas located in one office/amenities part of the building</li> <li>• The enclosed building and covered storage areas will minimise windblown dust and stormwater pollution</li> <li>• Development area designed to minimise the number of trees to be removed</li> <li>• Incorporates facilities for source separation of waste and recyclables</li> <li>• Waste storage areas would be well shielded from streetscape.</li> </ul>
5.4	Hazardous Waste Management	No hazardous waste would be accepted. An incoming waste inspection procedure would deal with any non-conforming waste brought to site.
5.5	On-Site Sewage Management	Designed by Indesco and shown on site plans provided with the development application.

### 3.5 WASTE LEVY GUIDELINES

Licensed waste facilities are liable to pay a levy under Section 88 of the Protection of the Environment Operations Act, 1997. Resource recovery facilities are required to record waste inputs and outputs and submit monthly reports to the NSW EPA that will determine whether they are required to pay a waste levy. The waste levy is triggered under the following circumstances:

- If the facility exceeds the authorised amount of waste stored on site at any one time;
- Stockpiling waste on site for more than 12 months; or
- Disposing of waste illegally.

The facility would be required to submit a waste report on the 26<sup>th</sup> of each month following the month the waste was received. Specific records will need to be kept using an approved method.



### 3.6 STANDARDS FOR MANAGING CONSTRUCTION WASTE IN NSW

Under Part 8A of the Waste Regulation, the facility must comply with the Standards for managing construction waste in NSW (NSW EPA, 2018) as a condition of the EPL. There are five standards that need to be complied with. The following table describes how the facility would comply with each standard.

Table 3-2: Compliance with Standards for managing construction waste in NSW

No.	Standard	Comment
1	<b>Inspection requirements</b>  1.1 Inspection point 1 – verified Weighbridge inspection 1.2 Inspection point 2 – Tip and spread inspection area 1.3 Training requirements for personnel 1.4 Rejected loads register	An incoming waste procedure detailed in Section 5 would be implemented at the site to ensure that inspection requirements are met.
2	<b>Sorting requirements</b>  Loads not rejected under Standard 1 must be sorted and classified into individual listed waste types before being transferred to the waste storage area referred to in Standard 4.	Listed waste types are provided in Section 2.2 and include: AGG – Aggregate, road base or ballast AL – Aluminium (non-ferrous) ASPH – Asphalt BC – Bricks or concrete CER – Ceramics, tiles, pottery COMM – Comingled recyclables FE – Ferrous (iron or steel) NFE – Non-ferrous (metals, not iron steel or aluminium) PAPER – Paper or cardboard PB – Plasterboard PL – Plastic WOOD – Wood, trees or timber
3	<b>No mixing of waste</b>  C&D waste that has been inspected and sorted in accordance with Standards 1 and 2 must not be mixed with any other waste at the facility unless: <ul style="list-style-type: none"> <li>• That other waste has been inspected and sorted at the facility in accordance with Standards 1 and 2; and</li> <li>• It is of the same listed waste type as the other waste; or</li> <li>• The mixing is carried out to meet the requirements of a RRO or the recovered fines specifications.</li> </ul>	The facility would comply with this standard as described in Section 2.1.



No.	Standard	Comment
4	<b>Waste storage requirements</b>  4.1 Waste storage area 4.2 Inspection point 3 – waste storage area	Waste storage at the facility would comply with this standard as described in Section 4.7.
5	<b>Transport requirements</b>  Construction waste must not be transported from the facility unless it has been inspected, sorted and stored in accordance with these standards and the load of waste consists solely of a single listed waste type or waste that meets the requirements of a resource recovery exemption or the recovered fines specification.  (Except where waste is rejected at inspection points 1 or 2)	The facility would comply with this standard as described in Section 4.8



## 4. WASTE CLASSIFICATION & MANAGEMENT

### 4.1 WASTE CLASSIFICATION

In the NSW EPA's *Waste Classification Guidelines* (2014), waste is described as:

- a) *any substance whether solid, liquid or gaseous that is discharged, emitted or deposited in the environment in such volume, constituency or manner as to cause an alteration in the environment; or*
- b) *any discarded, rejected, unwanted, surplus or abandoned substance; or*
- c) *any otherwise discarded, rejected, unwanted, surplus or abandoned substance intended for sale or for recycling, reprocessing, recovery or purification.*

All waste materials generated or received on the subject site must be classified into one of six different categories described the *Waste Classification Guidelines* (see table below).

Table 4-1: Classes of Waste from Waste Classification Guidelines

Class	Definitions / Examples
<b>Special waste</b>	<ul style="list-style-type: none"><li>• Clinical and related wastes;</li><li>• Asbestos waste;</li><li>• Waste tyres.</li></ul>
<b>Liquid waste</b>	<ul style="list-style-type: none"><li>• Waste that has an angle of repose &lt;5 degrees;</li><li>• Waste that becomes free flowing at or below 60°C;</li><li>• Is not generally capable of being picked up by a spade or shovel.</li></ul>
<b>Hazardous waste</b>	<ul style="list-style-type: none"><li>• Waste with a pH ≤2 or ≥12.5;</li><li>• Containers that have not been cleaned and contained dangerous goods within the meaning of the Transport of Dangerous Goods Code;</li><li>• Lead-acid or nickel-cadmium batteries.</li></ul>
<b>Restricted solid waste</b>	<ul style="list-style-type: none"><li>• This type of waste is determined by chemical tests.</li></ul>
<b>General solid waste (putrescible)</b>	<ul style="list-style-type: none"><li>• Waste from litter bins collected by local councils;</li><li>• Animal waste and food waste;</li><li>• Grit or screenings from sewage treatment systems that have been dewatered so that the grit of screenings do not contain free liquids.</li></ul>
<b>General solid waste (non-putrescible)</b>	<ul style="list-style-type: none"><li>• Paper or cardboard;</li><li>• Glass, plastic, rubber, plasterboard, ceramic, bricks, concrete or metal;</li><li>• 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</li></ul>

Waste associated with the proposed development is classified in the following section.



## 4.2 ONGOING WASTE

The expected type, quantity, onsite management and offsite destination of wastes associated with the facility are outlined in the following tables. The estimated maximum quantity is a gross estimation based averages of waste generated in NSW. The quantity for each waste type may vary significantly depending on the source that generated the waste.

Two tables are provided and include details of incoming waste (waste accepted at the site for processing) and recovered waste (materials recovered from the processing and separation of waste on site). The recovered waste includes any non-recyclable material from the process and any waste generated from ancillary activities.

Table 4-2: Incoming Waste Types, Quantities and Management

Waste Stream	Estimated Incoming Quantity	Waste Classification	Management
C&D Waste	66,500 tpa (based on 70% of 95,000tpa)	General Waste (Non-putrescible)	Mixed C&D waste would be sorted through the RRTF separately from C&I waste. The waste stream will undergo initial inspection, infeed hopper, removal of steel, screening, picking and further screening, air separation, baling and storage.
C&I Waste	28,500 tpa (based on 30% of 95,000 tpa)	General Waste (Non-putrescible)	Mixed C&I waste would be sorted through the RRTF separately from C&D waste. The waste stream will undergo initial inspection, infeed hopper, removal of steel, screening, picking and further screening, air separation, baling and storage.

Table 4-3: Recovered Waste Types, Quantities and Management

Waste Type	Estimated Maximum Quantity	EPA Waste Classification <sup>1</sup>	Management
Aggregates	38,950 tonnes per annum	General soil waste (non-putrescible)	This screened into varying standard sizes and directed to the designated external storage bay. Transported offsite to for reuse in construction projects under the Recovered Aggregates Order 2014.
Fines (-60 aggregate)		General soil waste (non-putrescible)	The smallest aggregate size that is screened through the process. Transported offsite to for reuse in landscape supplies.



Table 4-3: Recovered Waste Types, Quantities and Management

Waste Type	Estimated Maximum Quantity	EPA Waste Classification <sup>1</sup>	Management
Ferrous and Non-ferrous metal	7,600 tonnes per year	General solid waste (non-putrescible)	This waste is removed from the incoming load in the pre-sorting area or within the process at the ferrous magnet and transferred to a designated internal storage bay. Transfer offsite to a metal merchant for further processing. E.g. Sims Metal
Cardboard & Paper	9,500 tonnes per annum	General solid waste (non-putrescible)	This waste is removed from the incoming load in the pre-sorting area or within the process at the picking station and transferred to a baler where it is baled and stored in a designated area within the building. Bales are transferred offsite for further processing at, a licensed recycling facility. E.g. Visy Recycling
Wood	14,250 tonnes per annum	General solid waste (non-putrescible)	Large pieces of wood is removed from pre-sort area and stored in an internal storage bunker. Wood is also removed from the process at the picking station. Wood is transferred offsite for reuse at waste to energy plants or shredded for biofiltration or mulch. E.g. Landscape supply businesses, waste to energy plants.
Plastic	5,700 tonnes per annum	General solid waste (non-putrescible)	Plastic is separated from the waste stream at the picking station and stored in a designated bin. It is transferred offsite to a licensed recycling facility for further processing. E.g. Visy Recycling
Heavies	N/A Recycled back into system	General solid waste (non-putrescible)	This is the heavy fraction of waste that gets through the system without being separated. It is put back through the system to be reprocessed.
Light (SRF)	9,500 tonnes per annum	General solid waste (non-putrescible)	This material has the potential to be used as Solid Recovered Fuel (SRF) in future, but at this stage is sent to landfill with the non-recyclable waste.
Non-recyclable waste	9,500 tonnes per annum	General solid waste (non-putrescible)	General waste that cannot be recycled is stored removed at various points in the system. It is stored within a designated storage bunker inside the building and sent to a licensed landfill.



Table 4-3: Recovered Waste Types, Quantities and Management

Waste Type	Estimated Maximum Quantity	EPA Waste Classification <sup>1</sup>	Management
Office & Amenities Waste	10 tonnes per year	General solid waste (Putrescible)	This waste is ancillary to the process. A 3m <sup>3</sup> skip bin would be provided for any office and amenities waste generated on site. This would be serviced by a licensed waste contractor and sent to landfill as required.
Office Recyclables	24 tonnes per year	General solid waste (non-putrescible)	This waste is ancillary to the process. It is transferred offsite to a licensed recycling facility for further processing. E.g. Visy Recycling

Notes:

1. Waste classification according to *Waste Classification Guidelines* provided.

Only C&D and C&I waste would be accepted at the site. Examples of waste that is not accepted includes:

- ENM and VENM;
- Hazardous materials;
- Chemicals of any description;
- Asbestos;
- Fibro;
- Putrescible materials;
- Liquid waste;
- Spent gas bottles;
- Fibreglass;
- Palm trees;
- Stumps;
- Batteries;
- Paint; and
- Any of the above mixed with accepted waste types.

To ensure contaminated waste is not accepted at the site, the Incoming Waste Inspection Procedure outlined in Section 5 must be followed.

### 4.3 DEMOLITION WASTE

Demolition of the small existing metal shed is proposed. This is approximately 45m<sup>2</sup> in area. The dwelling and associated infrastructure would remain. Estimations of the waste generated as a result of the demolition phase and how this will be managed is provided in the following table.



Table 4-4: Expected Demolition Waste

Waste Type	Estimated Maximum Quantity (tonnes)	EPA Waste Classification <sup>1</sup>	Management
Excavation (eg soil, rock)	1	General solid waste (non-putrescible)	Reused on site
Greenwaste	0	General solid waste (non-putrescible)	N/A
Bricks	0	General solid waste (non-putrescible)	N/A
Concrete	0.5	General solid waste (non-putrescible)	Placed in designated skip bin and transported to an authorised recycling facility EG: SUEZ Kemps Creek.
Timber	0	General solid waste (non-putrescible)	N/A
Plasterboard	0	General solid waste (non-putrescible)	N/A
Metals: Scrap Colorbond	2	General solid waste (non-putrescible)	Placed in designated skip bin and transported to SUEZ Kemps Creek.
Other	0	N/A	N/A

Notes:

1. Waste classification according to *Waste Classification Guidelines* provided.

## 4.4 CONSTRUCTION WASTE

Construction works would involve establishment of a concrete hardstand area, car park, internal roadways, construction of a large building and associated infrastructure. Estimations of construction waste and how this will be managed is detailed in the table below.





Table 4-5: Expected Construction Waste

Waste Type	Estimated Maximum Quantity (tonnes)	EPA Waste Classification <sup>1</sup>	Management
Excavation (eg soil, rock)	>2,500	General solid waste (non-putrescible)	Reused on site for cut and fill purposes.
Greenwaste	10	General solid waste (non-putrescible)	Reused on site for landscaping purposes
Bricks	0	General solid waste (non-putrescible)	N/A
Concrete	60	General solid waste (non-putrescible)	Placed in designated skip bin to remain on site until it can be processed in the RRFT
Timber	2	General solid waste (non-putrescible)	Placed in designated skip bin to remain on site until it can be processed in the RRFT
Plasterboard	2	General solid waste (non-putrescible)	Placed in designated skip bin and transported to an authorised recycling facility EG: SUEZ Kemps Creek.
Metals: Scrap Colorbond	40	General solid waste (non-putrescible)	Placed in designated skip bin to remain on site until it can be processed in the RRFT
Other	5	N/A	Placed in designated skip bin and removed by a licensed waste contractor.

Notes:

- Waste classification according to *Waste Classification Guidelines* provided.

## 4.5 WASTE MANAGEMENT PLAN

A waste management plan required to be submitted to Penrith City Council for all development applications is provided in Attachment 1. This addresses all waste expected to be generated during the demolition, construction and operational phases of the proposed development as described in the previous sections.



The resource recovery facility receives, sorts and screens C&D and C&I waste for the purposes of on-selling the recovered material to for use in construction projects. Non-recyclable material is separated from this material and sent to a licensed landfill.

The waste management is to be conducted in accordance with the NSW EPA *Standards for managing construction waste in NSW 2019*.

#### **4.6 RECEIPT & HANDLING OF WASTE**

A description of the management of each waste type accepted and sorted on site is provided in Table 4-2 and Table 4-3.

The way waste is managed on site is described as follows:

- All incoming waste loads are brought to site in covered trucks.
- Waste is inspected at the weighbridge and during unloading. An incoming waste procedure is provided in Section 5 that explains the procedure that takes place if non-conforming material is found. Inspections are to be conducted in accordance with Standard 1 of the NSW EPA *Standards for managing construction waste in NSW 2019*.
- Trucks unload all waste within the unloading area inside the building.
- The building's water misting system is activated upon unloading and during any processing of waste to suppress emissions of dust. Pre-sorting is to be undertaken in accordance with Standard 2 of the NSW EPA *Standards for managing construction waste in NSW 2019*. There will be no mixing of inspected and sorted construction waste with construction waste that has not been inspected and sorted (Standard 3).
- Once pre-sorted, waste types are stored in designated storage bays according to the particular waste type. Storage management will be conducted in accordance with Standard 4 of the NSW EPA *Standards for managing construction waste in NSW 2019*.
- The remaining unsorted waste would be loaded into the infeed for processing through the RRFT system. At various points in the system, recovered materials would be separated into bins or storage bays by the system or by hand picking.
- Recovered materials would be loaded onto trucks and transported to licensed facilities or for reuse in construction projects.
- Residual waste unable to be reused is sent to a licensed landfill facility.
- All truck loads leaving the site are covered.
- Records of all incoming and outgoing loads would be maintained in accordance with Waste Levy Guidelines.

Overall, waste management practices that would be in place at the facility are considered adequate and comply with S48 of the *Protection of the Environment Operations Regulation 1997*, which states the facility must store and manage waste in an environmentally safe manner.

Management of waste on site will also be in line with the *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (EPA December 2012) as it includes the following practices:

- Visually screening designated waste areas and receptacles from public places (in building);
- Ensuring waste is stored adequately and cannot escape receptacles and storage areas; and
- Ensuring easy access to each waste storage area for collection services.



The facility would not accept liquid wastes, hazardous wastes, special waste including asbestos and waste tyres nor restricted solid waste. A procedure to deal with any unauthorised waste types found within incoming loads or inadvertently delivered to the site is provided in Section 5.

## **4.7 WASTE STORAGE**

The facility would need approval to store up to 9,000 tonnes of waste material on site at any one time.

Designated waste storage areas will be established. The waste storage areas are described below, including the estimated maximum waste quantity stored, and are shown on the site plan.

### Area 1: Incoming material stockpile (inside building)

The incoming material would be unloaded into a stockpile inside the building to be pre-sorted. This material would be temporarily stored for pre-sorting then loaded into the infeed hopper for processing in the RRFT. It is estimated this stockpile would store a maximum of 600 tonnes of waste.

The waste classification for the materials is General Solid waste (Non-putrescible).

### Area 2: Internal storage bunkers (inside building)

There would be four large walled bunkers within the building for the storage of waste, wood, steel and “other” materials. The storage bays would be constructed of steel frame and plate push walls up to 2.5 m high. This area would store up to 3,000 tonnes of waste or recovered materials. The maximum storage volume of each bunker is:

Bunker 1: C&I storage – 350m<sup>3</sup>

Bunker 2: Steel storage – 380m<sup>3</sup>

Bunker 3: Wood storage – 380 m<sup>3</sup>

Bunker 4: Other waste materials storage – 370m<sup>3</sup>

The waste classification for these materials is General Solid waste (Non-putrescible).

### Area 3: RRFT bins/bunkers (inside building)

At various points along the RRFT, there would be small bins or bunkers where steel, paper/cardboard, wood, plastic and “other” material would be separated from the waste stream. These bins/bunkers would store up to 500 tonnes of recovered materials.

Waste Screen Bin x 1 bin of 5 to 10m<sup>3</sup> capacity

Picking Bins x 4 bins, each 5 to 10 m<sup>3</sup> capacity

Air Separator Bunkers x 2 bunkers each 90m<sup>3</sup> capacity

Bounce Separator Bunkers x 2 bunkers at 120m<sup>3</sup> and 95m<sup>3</sup> capacity

The waste classification for these materials is General Solid waste (Non-putrescible).



#### Area 4: External covered storage bunkers (Covered storage bays)

At the waste screen, aggregate would be sized into -6, 16, 32 and 60 mm sizes which would be directed by conveyor into external storage bunkers located adjacent to the building and covered by an awning. This area would store up to 4,000 tonnes of recovered materials.

Soil storage bunkers: 308m<sup>3</sup>  
60 Aggregate bunker: 225m<sup>3</sup>  
32 Aggregate bunker: 295m<sup>3</sup>  
16 Aggregate bunker 245m<sup>3</sup>  
-6 Fines bunker 155m<sup>3</sup>

Aggregates are a coarse to medium grained particulate material used in construction including sand, gravel, crushed stone, slag and recycled concrete. The classification for all aggregate material in accordance with the NSW EPA Waste Classification Guidelines is: General Solid waste (Non-putrescible).

#### Area 5: Paper bale storage area (inside building)

Paper bales would be stored inside the building adjacent to the baler. This area would store up to 500 tonnes of baled material.

The waste classification for this material is General Solid waste (Non-putrescible).

The estimated waste storage quantity on site is 8,600 tonnes. With a factor of safety applied to the estimated storage, the facility seeks approval to store a maximum of 9,000 tonnes of waste at the site at any one time.

### **4.7.1 Waste storage requirements**

Waste would be stored in designated storage bunkers or bins as described in the previous section. The location of these areas is shown on the site plan. Each bunker or bin would be clearly signposted to indicate the waste type stored within.

Signs at waste storage areas containing waste awaiting test results under resource recovery orders must contain the words "awaiting validation".

### **4.7.2 Inspection of waste storage areas**

Waste storage areas would be inspected daily for the following:

- Waste types stored within designated area conform to the signpost of the bunker/bin;
- Signposts are clearly legible and visible at all bunkers/bins
- Any areas containing waste awaiting compliance results contain a sign that reads "awaiting validation"
- No waste is stored outside designated bunkers/bins or areas (in the case of paper bales and incoming pre-sort stockpile area).



## 4.8 TRANSPORT OF WASTE

The transport of the waste streams accepted at the site are not required to be undertaken by licensed waste transporters as the waste is not trackable waste.

Under Part 6 of the Protection of the Environment Operations (Waste) Regulation 2014, the following is required:

- Waste must be transported in a manner that avoids the waste spilling, leaking or otherwise escaping.
- Waste must be covered during transport unless the waste consists solely of waste tyres scrap metal.
- Transport vehicles must be constructed and maintained to avoid waste spilling leaking or otherwise escaping from the vehicle.
- Any material that has been segregated for recycling must not be mixed with other waste during transportation.
- Transport of waste must abide by the proximity principle which restricts the transport of waste by road more than 150km from its origin.

Under Section 143 of the Protection of the Environment Operations Act, 1997, waste is required to be transported to a place that can lawfully accept it.

Waste types to be transported from the site would consist solely of a single listed waste type or waste that meets the requirements of a resource recovery exemption or the recovered fines specification.

The above requirements would be met by transporters of the waste to and from the facility.

## 4.9 QUALITY CONTROL

Procedures would be put in place to manage the input and output quality of the incoming waste and recovered material.

### 4.9.1 Incoming Waste

Quality control for incoming waste includes:

- Control of the wastes accepted into the facility, as described in the incoming waste procedure in Section 5.
- Contaminants are minimised through visual inspection to ensure inappropriate items are removed from the waste stream at the pre-sorting area.
- Further physical separation of the impurities from the waste stream at the picking station to remove contaminants from the waste prior to entering the final separation process.
- Regular maintenance of the RRFT as per manufacturer's specifications.
- Suppliers of waste would be from authorised reputable companies whose details would be recorded with all incoming loads.



## 4.9.2 Recovered Material

Recovered material will be produced to contain less than 1% impurities. This will be achieved by:

- Physical separation of impurities from the incoming waste stream in the pre-sorting area, at multiple screens and through manual QC picking stations to ensure that impurities are removed from each type of recovered material.
- Aggregates recovered from the waste would be sampled and tested in accordance with the *Specification for Supply of Recycled material for pavements, earthworks and drainage* (Department of Environment, Climate Change and Water NSW, 2010) to enable supply of this material for use in pavements, earthworks and drainage.
- Aggregates recovered from the waste would be sampled and tested in accordance with *the recovered aggregate order 2014*. Controls to be put in place to meet the conditions of the order are detailed in the sub-section below.

### 4.9.2.1 Recovered Aggregates

Recovered aggregates would need to comply with the conditions of the recovered aggregate order 2014 to be re-used off site for application to land for road making activities, building, landscaping and construction works. "Processor responsibilities" under the order apply to the facility and the following quality control measures would be put in place:

- A written sampling plan would be prepared including:
  - A description of sample preparation
  - Storage procedures for samples
  - Sampling method
  - Testing for list of chemicals and attributes as per column 1 of table 1 of the order
  - Validation of test results with values listed in the order.
  - Record keeping procedures
- Sampling to be carried out in accordance with AS 1141.3.1-2012 – Methods for sampling and testing aggregates – Sampling – Aggregates and Clauses 4.2 or 4.3 of the order
- Contaminant testing would be undertaken at a NATA certified laboratory
- Record keeping of all test results
- Preparation of a written statement of compliance certifying that the recovered aggregate complies with the conditions of the recovered aggregate order. This would be supplied to consumers of the recovered aggregate along with copies of test results, a copy of the order and exemption.
- Written records detailing the supply of recovered aggregates would be maintained for at least six years and would need to include:
  - Quantity of recovered aggregate supplied
  - Name and address of each person (and location) to whom the recovered aggregate was supplied
  - Name of the transporter and vehicle registration number
  - Date of transportation

In the event the recovered aggregate does not comply with the recovered aggregate order, alternative uses for the aggregate such as use in concrete or other products would be investigated.



## 4.10 MONITORING & RECORDS

Records of incoming and outgoing waste would be required under an Environment Protection Licence. A weighbridge would record all loads entering and leaving the facility. Records would need to be kept using an approved method that complies with the Waste Levy Guidelines.

Each storage bay / bunker / bin or area at the facility will need to have a unique identification number.

For all information recorded, the following would be needed in accordance with Part 3 of the Waste Regulation:

- Original records of information (such as paper documents) retained and accessible to EPA in their original form;
- All record-keeping systems are designed so that details of any adjustments are recorded against the adjusted record, including that the record has been amended and the extent of the change;
- All electronic records are backed up weekly and back ups stored in a secure location;
- Quantity of waste is recorded to two decimal places;
- All electronic records are to be downloadable by the EPA in an .xls, .xlsx, .csv or .dbf format at any time.

For each vehicle entry and exit the following will be recorded using at the gate house:

### Incoming Loads:

- Date & time received;
- Name of customer;
- Address of facility received from/customer address;
- Environment Protection Licence Number for the facility/customer;
- Estimated Weight/Volume of load to two decimal points (eg: 14.22 tonnes);
- Waste Stream;
- Vehicle registration number (including any trailer(s));
- Name of driver; and
- Location of where the material is placed at the site;
- Details of any unauthorised waste found in load

### Outgoing Loads:

- Date & time dispatched;
- Name of destination;
- Address of destination;
- Environment Protection Licence Number of destination (if applicable);
- Estimated Weight/Volume of load to two decimal places;
- Storage Bay ID No. from which the material was removed;
- Vehicle registration number;
- Name of driver; and
- Contents of load eg: Waste type.



#### **4.10.1 Rejected Loads Register**

The following will be recorded in a rejected loads register for each load rejected from the facility:

1. Date and time the load was rejected
2. Vehicle registration number including any trailers transporting the rejected load of waste both to and from the facility
3. The type of waste(s) in the rejected load of waste
4. The reason the load was rejected.





## 5. INCOMING WASTE PROCEDURE

### 5.1 PURPOSE

The purpose of this procedure is to facilitate the process of dealing with unauthorised or non-conforming waste brought onto the site. The procedure will enable the identity of waste types found within incoming loads and brought onto site to be confirmed and deal with any unexpected or non-conforming wastes such as asbestos.

### 5.2 DEFINITIONS

For the purposes of the procedure, the following definitions of relevance:

#### **Contaminated Material**

*Materials that contain substances that are of sufficient concentration to potentially cause harm to human health or the environment. (EPA Act)*

#### **Acceptable wastes**

Acceptable wastes include construction and demolition (C&D) waste and commercial and industrial (C&I) waste from reputable sources and is expected to include:

AGG – Aggregate, road base or ballast  
AL – Aluminium (non-ferrous)  
ASPH – Asphalt  
BC – Bricks or concrete  
CER – Ceramics, tiles, pottery  
COMM – Comingled recyclables  
FE – Ferrous (iron or steel)  
NFE – Non-ferrous (metals, not iron steel or aluminium)  
PAPER – Paper or cardboard  
PB – Plasterboard  
PL – Plastic  
WOOD – Wood, trees or timber

#### **Suspect material / Not accepted**

Not accepted at the site are any contaminated or non-conforming wastes such as:

- ENM and VENM or any fill material;
- Hazardous materials;
- Chemicals of any description;
- Asbestos;
- Fibro;
- Putrescible materials;
- Liquid waste;
- Spent gas bottles;
- Fibreglass;
- Palm trees;
- Stumps;



- Batteries;
- Paint; and
- Any of the above mixed with accepted waste types.

### 5.3 TRAINING REQUIREMENTS

Training of personnel responsible for inspections, sorting and waste storage at the facility would include:

- Training in legal and other requirements for waste including:
  - Relevant requirements of the POEO Act (including the waste regulation);
  - Requirements of any waste conditions in the facility's EPL;
  - The five standards of the *Standards for managing construction waste in NSW*.
- Successful completion of a nationally accredited asbestos awareness course;
- Personnel involved in removing bonded asbestos must complete nationally accredited course in bonded asbestos removal before undertaking any task that involves removing bonded asbestos.

Other relevant environmental awareness training and details regarding maintenance of training records would be included in the site's Environmental Management Plan.

### 5.4 PROCEDURE

Loads are to be inspected at the following points in the process:

1. At the weighbridge;
2. While unloading in the pre-sorting area.

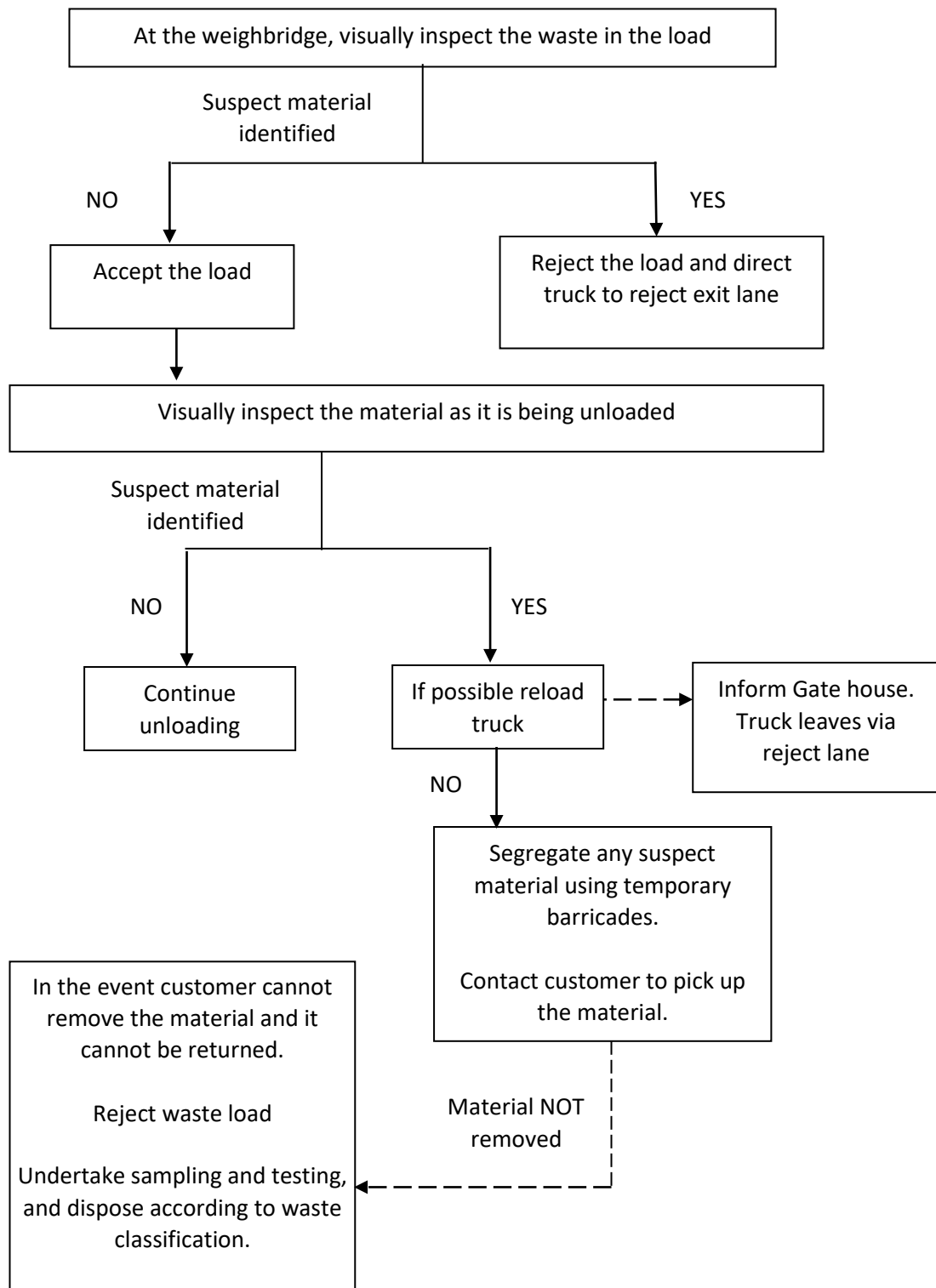
Upon the finding of suspect or contaminated material at the weighbridge, the non-conforming load shall be directed by the gate house personnel to use the reject truck exit lane to immediately leave the property. Record details in the rejected loads register.

Upon the finding of suspect or contaminated material within a load during unloading in the pre-sorting area, the following actions are required:

- If possible, re-load the truck.
- Report the non-conforming material to the gate house personnel. Gate house personnel will need to record details in the rejected loads register.
- Direct the truck to leave the facility via the reject truck exit lane.
- If re-loading the truck is not possible, secure the area, secure the material using temporary barricades within a designated area inside the building.
- Contact the customer and direct them to pick up the material.
- As a contingency, should the customer be unable to collect the material, contact a suitably qualified consultant to determine the appropriate waste classification. This may involve sampling and testing of the material in accordance with regulatory guidelines. Once the waste classification for the material is known, dispose of this lawfully using a licensed waste contractor.

The following figure presents the steps to be followed in the event of suspect or contaminated material being found:

Figure 5-1: Incoming load inspection





## 5.5 INSPECTION AND RECORDS

### 5.5.1 Records of incoming loads

The following details for incoming waste need to be maintained:

- Date & time received;
- Name of customer;
- Address of facility received from/customer address;
- Environment Protection Licence Number for the facility/customer;
- Estimated Weight/Volume of load to two decimal points (eg: 14.22 tonnes);
- Waste Stream;
- Vehicle registration number (including any trailer(s));
- Name of driver; and
- Location of where the material is placed at the site;
- Details of any unauthorised waste found in load

### 5.5.2 Rejected Loads Register

Any non-conforming waste must be recorded in the rejected loads register and include the following details:

1. Date and time the load was rejected
2. Vehicle registration number including any trailers transporting the rejected load of waste both to and from the facility
3. The type of waste(s) in the rejected load of waste
4. The reason the load was rejected.

### 5.5.3 Other Non-conforming waste

Documentation for any sampling, testing and alternate disposal of the waste must also be maintained.

This concludes the report.

Linda Zanotto  
Senior Environmental Engineer

R T Benbow  
Principal Consultant



## 6. LIMITATIONS

Our services for this project are carried out in accordance with our current professional standards for site assessment investigations. No guarantees are either expressed or implied.

This report has been prepared solely for the use of Greenfields Resource Recovery Facility, as per our agreement for providing environmental services. Only Greenfields Resource Recovery Facility is entitled to rely upon the findings in the report within the scope of work described in this report. Otherwise, no responsibility is accepted for the use of any part of the report by another in any other context or for any other purpose.

Although all due care has been taken in the preparation of this study, no warranty is given, nor liability accepted (except that otherwise required by law) in relation to any of the information contained within this document. We accept no responsibility for the accuracy of any data or information provided to us by Greenfields Resource Recovery Facility for the purposes of preparing this report.

Any opinions and judgements expressed herein, which are based on our understanding and interpretation of current regulatory standards, should not be construed as legal advice.

## **ATTACHMENTS**

## Attachment 1: Development Applications

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# WASTE MANAGEMENT PLAN

## DEMOLITION, CONSTRUCTION AND USE OF PREMISES

.....  
If you need more space  
to give details, you are  
welcome to attach extra  
pages to this form.

PLEASE COMPLETE ALL PARTS OF THIS FORM THAT ARE RELEVANT TO YOUR DEVELOPMENT APPLICATION (DA).

IF YOU NEED MORE SPACE TO GIVE DETAILS, YOU ARE WELCOME TO ATTACH EXTRA PAGES TO THIS FORM.

Council will assess the information you provide on this form along with your attached plans. We will take into account the types and volumes of waste that could be produced as a result of your proposed development, and how you are planning to:

- minimise the amount of waste produced
- maximise re-use and recycling
- store, transport and dispose of waste safely and thoughtfully.

### APPLICANT DETAILS

First name

Ellie

Surname

Barikhan

Postal Address

Street No.

344

Street name

Park Road

Suburb

Wallacia

Post code

2745

Contact phone number

0407 333 333

Email address

888minerals@gmail.com

### DETAILS OF YOUR PROPOSED DEVELOPMENT

Street No.

344

Street name

Park Road

Suburb

Wallacia

Post code

2745


What buildings and other structures are currently on the site?

One single storey house (dwelling) and two small sheds.

Briefly describe your proposed development

Establishment and operation of a resource recovery facility that accepts construction & demolition and commercial & industrial waste streams and processes these to produce recoverable products. This would involve construction of a purpose built building with covered storage bunkers, conversion of existing dwelling into an office, development of internal roads, parking and associated infrastructure.

Applicant Signature



Date

11/5/2020



## SECTION 1: DEMOLITION

\*Please include details on the plans you submit with this form, for example location of on-site storage areas/containers, vehicle access point/s.

Materials		Destination		
		Re-use and recycling		Disposal
Material	Estimated volume (m <sup>2</sup> or m <sup>3</sup> )	ON-SITE* Specify proposed re-use or on-site recycling	OFF-SITE Specify contractor and recycling facility	Specify contractor and landfill site
Excavation (eg soil, rock)	1 tonne	reused on site to level land where demolition		
Green waste	0			
Bricks	0			
Concrete	0.5 tonnes		Placed in designated skip bin. SUEZ	
Timber (Please specify type/s)	0			
Plasterboard	0			
Metals (Please specify type/s)	2 tonnes		Placed in designated skip bin. SUEZ	
Other	0			

## SECTION 2: CONSTRUCTION

\*Please include details on the plans you submit with this form, for example location of on-site storage areas/containers, vehicle access point/s.

Materials		Destination		
		Re-use and recycling		Disposal
Material	Estimated volume (m <sup>2</sup> or m <sup>3</sup> )	ON-SITE* Specify proposed re-use or on-site recycling	OFF-SITE Specify contractor and recycling facility	Specify contractor and landfill site
Excavation (eg soil, rock)	>1000 m <sup>3</sup>	Any cut and fill material would be		
Green waste	10 m <sup>3</sup>	Reused on site for landscaping purposes		
Bricks	0			
Concrete	60 tonnes		Placed in designated skip bin to remain on	
Timber (Please specify type/s)	2 tonnes		Placed in designated skip bin to remain on	
Plasterboard	2 tonnes		Placed in designated skip bin to remain on	
Metals (Please specify type/s)	40 tonnes		Placed in designated skip bin to remain on	
Other	5 tonnes			Placed in a designated skip bin to be removed

### SECTION 3: WASTE FROM ON-GOING USE OF PREMISES

If relevant, please list the type/s of waste that may be generated by on-going use of the premises after the development is finished.	Expected volume (average per week)
Residual waste including any non-recyclable material found within the incoming waste streams and any light waste (SRF) requiring disposal.	350 tonnes per week
Office and amenities waste (general solid waste - putrescible)	190 kg per week
Office recyclables	460 kg per week

### SECTION 4: ON-GOING MANAGEMENT OF PREMISES

If relevant, please give details of how you intend to manage waste on-site after the development is finished, for example through lease conditions for tenants or an on-site caretaker/manager. Describe any proposed on-site storage and treatment facilities. Please attach plans showing the location of waste storage and collection areas, and access routes for tenants and collection vehicles.

A detailed waste management report has been provided with the EIS to support the development application. This report details the management of the incoming waste and recovered materials and any waste generated from the process and ancillary activities. The site plans provided show the waste storage locations. The facility is a proposed resource recovery facility and therefore no tenants or residential units exist.