Hunter Power Project

Construction Waste Management Plan

| Approved Version 3

25 November 2024

Hunter Power Project

Document Title:	Construction Waste Management Plan
Revision:	Approved Version 3
Date:	6 November 2024
Client Name:	Snowy Hydro
Author:	**Approved document updated by Snowy Hydro**
File Name:	Waste Management Plan_Ver 3

Document history and status prior to approval

Revision	Date	Description	Author	Checked	Reviewed	Approved
Final	20 December 2021	Final	A Horan	P Horn	M Luger	K Ivanusic
Amended Final	28 December 2021	Final	A Horan	I Smith	M Luger	K Ivanusic

The initial management plan was prepared by Jacobs and Snowy Hydro and approved by the Department for the Hunter Power Project. Details of the review process are detailed in the document history table above. Subsequent versions of the approved management plan have been updated by Snowy Hydro in consultation with the Department's Environmental Representative as required and the reasons for the management plan updates are detailed in the table below.

Approved management plan version history

Approved version	Date	Description of changes	Author	Date Endorsed by ER
1	28 December 2021	Previously referred to as Amended Final	A Horan and A van der Kroft	2 March 2022
2	29 December 2023	Updated in response to approval of Modification 2 on 16 November 2023	R Vazey and A van der Kroft	13 February 2024
3	25 November 2024	Updated to include commissioning	S. Cornell, M. Luger and A. van der Kroft	18 December 2024

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Glossary of terms

Term	Meaning
Commissioning	Program of testing and certification of all Project components, systems, and processes to demonstrate the Project can operate to the required standards before commencing operation. This includes cold commissioning stage comprised of standard construction type activities, and hot commissioning stage comprised of burning fuel to set up the operational plant and test it according to various performance scenarios
Department	Same meaning as Department under the EP&A Act
Mitigation	Action to reduce the severity of an impact
Principal Contractor	The Contractor engaged by Snowy Hydro Limited, who has management and control over the construction and commissioning stages of the Project, and who will plan, manage, monitor and coordinate Health, Safety and Environment activities
The Project	The Hunter Power Project; formerly referred to as the Kurri Kurri Power Station Project
Project Site	The area of land that is directly impacted on by a development, including access roads, and areas used to store construction material
Proponent	Snowy Hydro Limited
Secretary	Planning Secretary under the EP&A Act, or nominee
Secretary's Approval	A written approval from the Secretary and/or delegate
Significant	Greater than 20% concentration value difference between impact site and reference site

Abbreviations

Abbreviation	Meaning
CEMS	Construction Environmental Management Strategy
CRM	Community Relationship Manager
CWMP	Construction Waste Management Plan
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EP&A Act	*Environmental Planning and Assessment Act 1979* (New South Wales)
NSW	New South Wales
OWMP	Operational Waste Management Plan
POEO Act	*Protection of the Environment Operations Act 1997* (NSW)

1. Introduction

This Construction Waste Management Plan (CWMP or Plan) has been prepared for the construction and commissioning phases of the Hunter Power Project (the Project) and is a management plan within the Construction Environmental Management Strategy (CEMS).

The objective of this CWMP is to mitigate impacts and risks associated with waste and resource consumption during construction and commissioning of the Project through:

- Identifying the key waste issues that require control measures
- Developing strategies to manage impacts from waste and implementing those strategies
- Assigning responsibilities for impact monitoring and management
- Providing sufficient information to assist with auditing the implementation of the CWMP
- Establishing a waste monitoring program and management measures

Maximising workers' awareness of waste management issues and avoiding or minimising potential impacts due to waste generation and management.

1.1 Project overview

Snowy Hydro ('the Proponent') proposes to develop a gas fired power station near Kurri Kurri, New South Wales (NSW) (refer to Figure 1-1). The Project involves the construction, commissioning and operation of an open cycle gas turbine power station and electrical switchyard, together with other associated infrastructure. A layout of the Project is provided in Figure 1-2 with the Project location and Project Area, including Precinct 3B following the approval of Modification 1 on 1 March 2023 and the Temporary Worker Accommodation Facility following the approval of Modification 2 on 16 November 2023.

The Project Site address is 1 Hart Road, Loxford. Access to the property is via an extension of Hart Road and the property is approximately 1.0 kilometres (km) from the M15 Hunter Expressway.

The major supporting infrastructure that is part of the Project would be a 132 kilovolt (kV) electrical switchyard located within the Project Site. The Project would connect into the existing 132 kV electricity transmission infrastructure located adjacent to the Project Site. Other supporting infrastructure elements of the Project include:

- Storage tanks and other water management infrastructure
- Fire water storage and firefighting equipment such as hydrants and pumps
- A provisional stormwater retention basin
- Maintenance laydown areas
- Diesel fuel storage tank(s) and truck unloading facilities
- Site access roads and car parking
- Office/administration buildings and amenities
- Workshop/storage areas
- Car parking, site access roads, fabrication and laydown areas located within Precinct 3B, shown on Figure 1-2
- Temporary Worker Accommodation Facility, shown on Figure 1-2.

Construction activities commenced in early 2022. Commissioning is anticipated to commence in December 2024 and the Project is intended to be operational in early 2025.

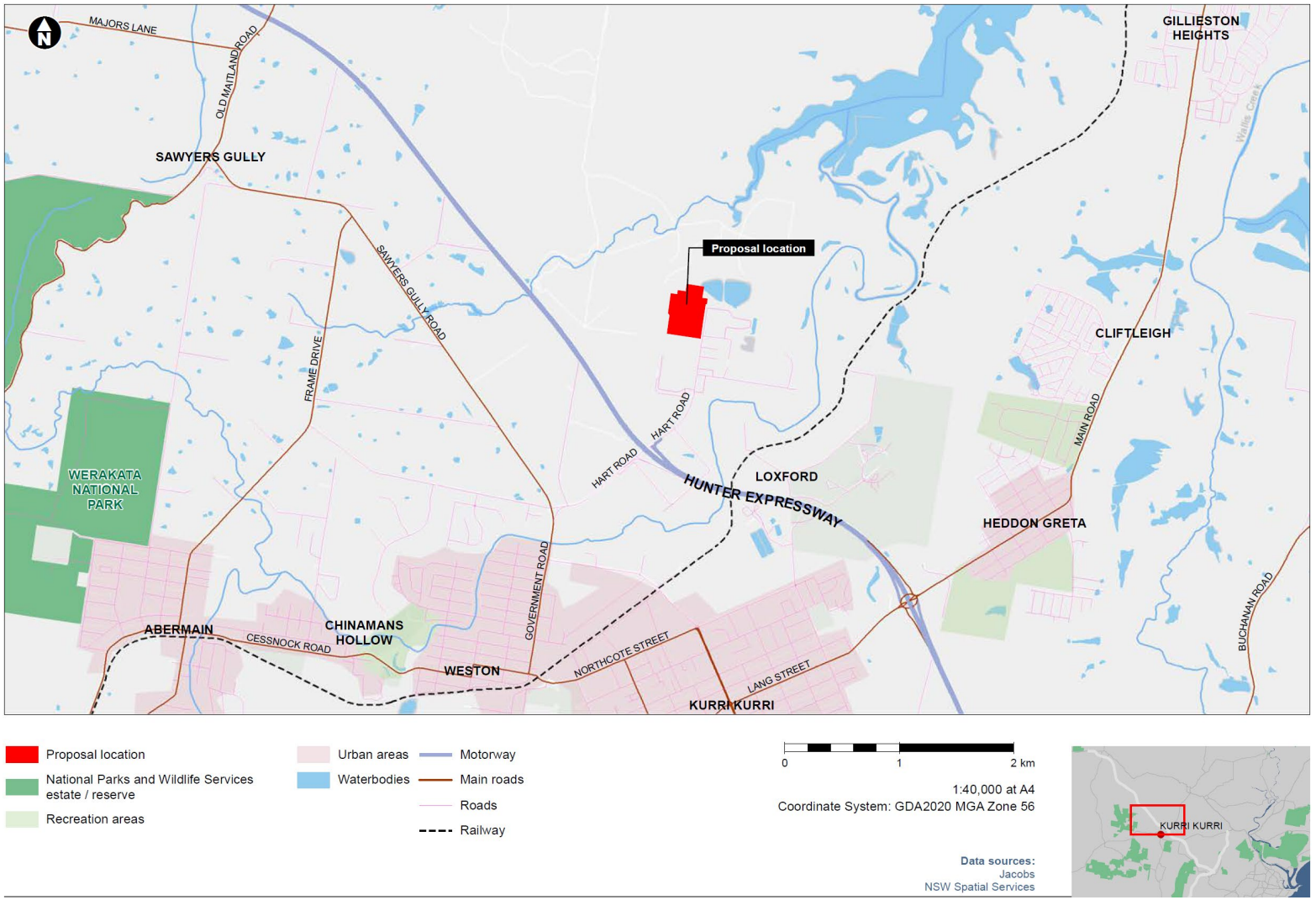

Figure 1-1 Project location (regional)

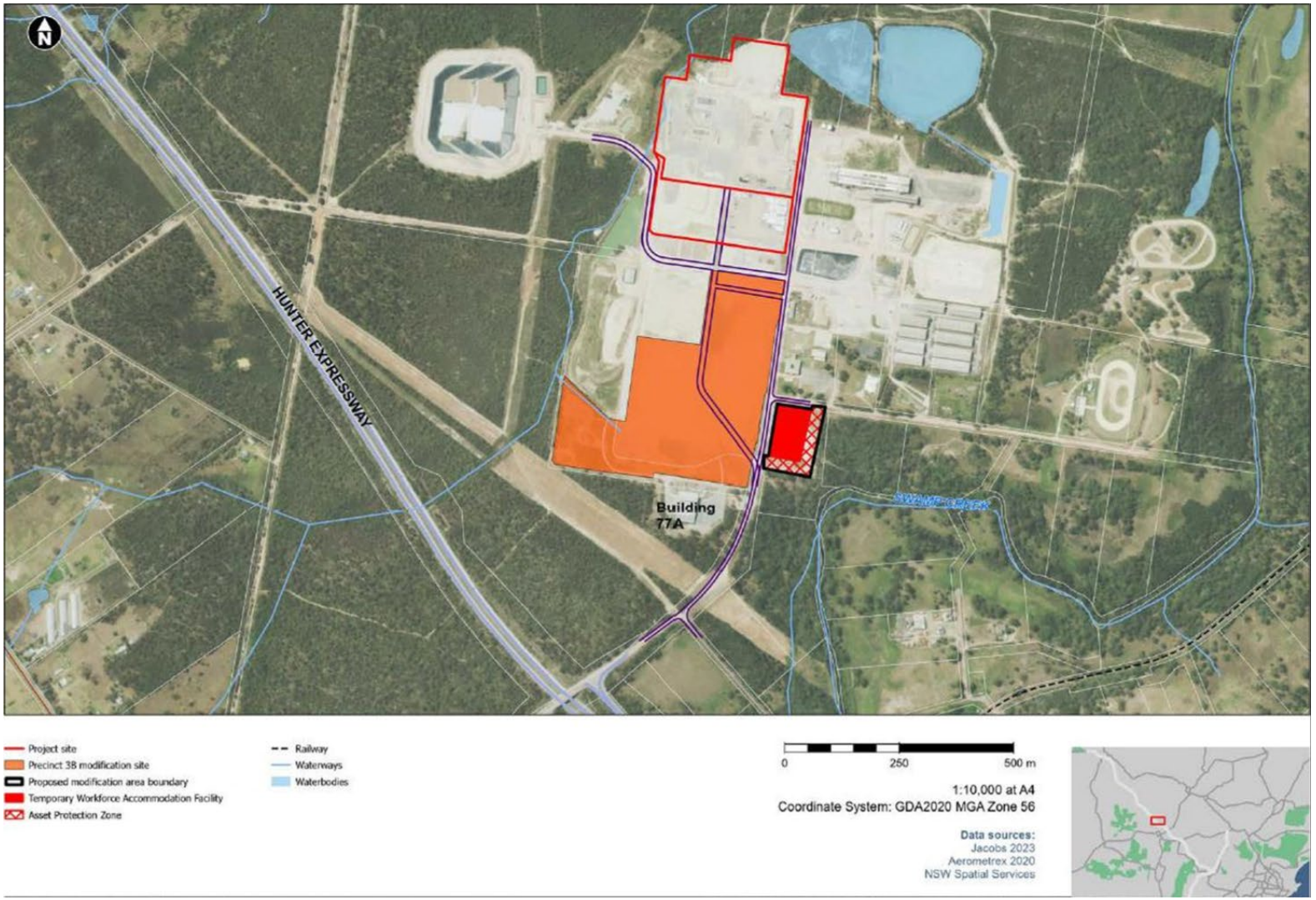

Figure 1-2 Project location (local)

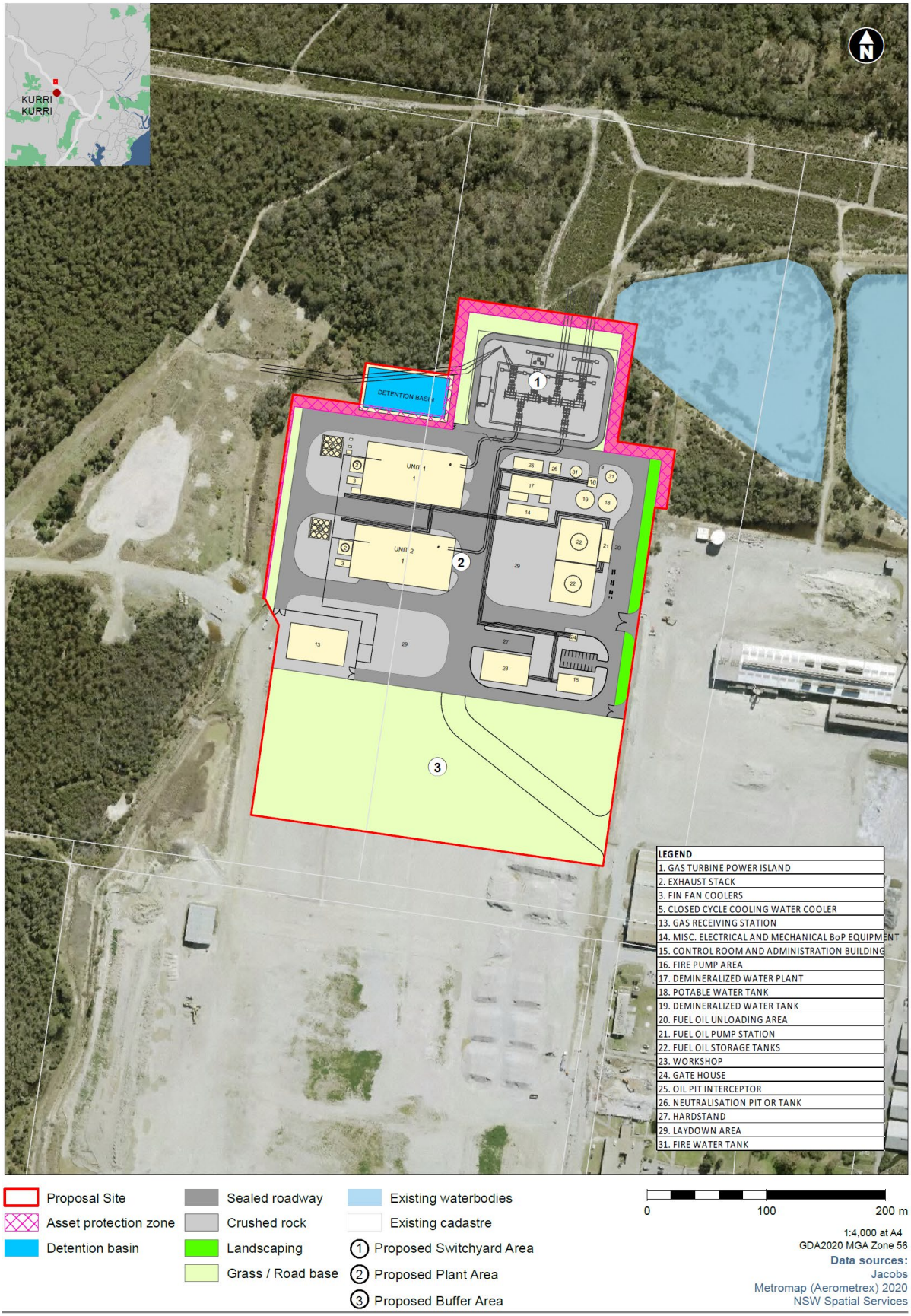

Figure 1-3 Site layout

1.2 Context

The Project Site is within the broader property that is the former Hydro Aluminium smelter, which is highly disturbed and currently a construction site. The construction activities on the broader property are industrial in nature and involve remediation and waste transport (internal to the site) as part of the property preparation for subsequent industrial users.

The Project Site and broader property would, after construction activities are completed, be part of an Industrial Estate development. The proposed rezoning and subdivision around and including the Project Site would likely result in a new land use zoning and property description applying to the Project Site. The planning proposal, currently under consideration by Cessnock City Council and the Department, includes rezoning the Project Site as Heavy Industrial. The Project Site and its surrounds are currently zoned RU2 Rural Landscape under the Cessnock Local Environmental Plan 2011, with small pockets of surrounding land zoned E2 Environmental Conservation.

1.3 Construction and commissioning activities

The key construction and commissioning activities for the Project are summarised in Table 1-1, and Section 3 describes the impacts and risks associated with waste.

Table 1-1 Construction and commissioning activity summary

Construction stage	Construction activity per program	Activity details
Pre-construction/site establishment	Site access, civil works, and road construction to establish site	▪ Installation of environmental controls, which may include: temporary sheds, amenities, fencing, erosion and sediment controls, laydown/stockpiling areas, site surveys and, initial internal road building ▪ Construction of reinforced concrete pavement to support heavy vehicles (up to B-double size) ▪ Internal road layout design to account for turning paths of large vehicles, cranes, and articulated vehicles, so that movements in and out can be made in a forward direction ▪ Roadworks and hardstand areas to be constructed for car parking, delivery/laydown areas ▪ Where required, bunded areas for delivery, handling, and storage of fuel and other hazardous material would be constructed
Construction	Switchyard site preparation -	▪ Clearing of vegetation
Site establishment and construction	Earthworks to prepare the Project Site and construction areas	▪ Initial site clearing and grading works. Earthworks may involve small amounts of cut and fill to achieve the necessary design levels across the site ▪ Trenching for underground utilities and services would be installed such as stormwater, water and sewer reticulation, electrical cables, and (internal) gas pipes between the gas receiving station and the gas turbine locations ▪ Preparation and construction of foundations. Deep piling is expected to support the heaviest infrastructure such as the gas turbines, generator and the main step-up transformers while shallower piling or pad type foundations would underpin the foundations where the proposed surface loads are less (e.g. site office/administration buildings, car park). Final numbers and depth of foundation piles will be subject to detailed

Construction stage	Construction activity per program	Activity details
		design, as is the piling method (i.e. bored; driven; vibration piling) ▪ Reinforced concrete slabs would be constructed in certain pavement areas, with other areas being surfaced with crushed rock or other suitable materials ▪ Establishment of car parking, site access roads, fabrication and laydown areas within Precinct 3B, shown on Figure 2-2
Construction	Balance of plant, switchyard construction, & turbine installation	▪ Installation of major plant items associated with the gas turbines including all above ground civil, mechanical, electrical plant equipment ▪ Installation of electrical switchyard ▪ Use of car parking, site access roads, fabrication and laydown areas within Precinct 3B ▪ Construction and occupation of 200 bed Temporary Workforce Accommodation Facility
Commissioning	Commissioning and testing (excluded from construction scope)	▪ Program of testing and certification of all Project components, systems, and processes to demonstrate the Project can operate to the required standards before commencing operation ▪ Commissioning comprises two phases: ○ Cold commissioning – has standard construction activities ○ Hot commissioning – has activities associated with setting up the operational plant and testing it according to a range of scenarios
Post-construction/ demobilisation	Demobilisation	▪ Removal of construction equipment, site fencing and construction compounds ▪ Installation and establishment of landscaping ▪ Relinquishment of Precinct 3B to landowner ▪ Demobilisation of Temporary Workforce Accommodation Facility and relinquishment of area to landowner

1.4 Construction and commissioning program

Construction of the Project commenced early in 2022, is ongoing and will overlap with commissioning of the project, which will occur in two phases:

- Phase 1 - During the first phase of commissioning the gas turbines will be commissioned on diesel fuel. The balance of the plant (other than those components associated with natural gas storage and supply) will also be commissioned during this phase. Phase 1 of commissioning is scheduled to commence at the end of 2024
- Phase 2 - During the second phase of commissioning the gas turbines will be commissioned on natural gas. The balance of the plant not commissioned on Phase 1 will also be commissioned during this phase. Phase 2 of commissioning will occur once construction of the natural gas supply pipeline is completed and has been commissioned.

1.5 Relationship to the Construction Environmental Management Strategy

There are two primary interrelationships of this CWMP to other regulatory documents, which are outlined below.

Construction Environmental Management Strategy

A CEMS is required by Infrastructure Approval Condition C1, and a CWMP is required as a sub-plan to the CEMS. The CEMS provides for the overarching management requirements for the Project. The CEMS provides systems and procedures to ensure that controls are established and maintained to manage the potential environmental impacts, compliance and performance through the construction and commissioning phases of the Project in accordance with the Project approval and applicable legislative requirements.

Environment Protection Licence (EPL) for Scheduled Development Work

Condition O5 of EPL 21627 addresses waste management and requires the following:

- O5.1: The licensee must ensure that any liquid and/or non-liquid waste generated and/or stored at the premises is assessed and classified in accordance with the EPA's Waste Classification Guidelines as in force from time to time.
- O5.2: The licensee must ensure that waste identified for recycling is stored separately from other waste.

These EPL requirements have been incorporated into this CWMP.

2. Legislative context

2.1 Overview

This CWMP has been prepared in accordance with the relevant legislative and regulatory requirements applicable to waste and resource consumption in NSW (Table 2-1). The detailed requirements of the legislation are provided in Appendix A of the CEMS.

Table 2-1 Summary of relevant legislation

Legislation	Key Requirements	Implications for the CWMP
Environmental Planning and Assessment Act 1979	This Act establishes a system of environmental planning and assessment of development proposals for the State.	Infrastructure Approval conditions have been incorporated into the CWMP.
Protection of the Environment Operations Act 1997 (POEO Act)	Part 5.2: It is an offence to wilfully or negligently: ▪ Section 115: Dispose of waste in a manner that harms or is likely to harm the environment. ▪ Section 116: Cause any substance to leak, spill or otherwise escape (whether or not from a container) in a manner that harms or is likely to harm the environment.	Mitigation measures incorporated to manage and dispose of waste – Section 4.4-4.8.
	Division 3: It is an offence: ▪ Section 143: To transport waste to a place that cannot lawfully be used as a waste facility for that waste, or cause or permit waste to be so transported. ▪ Section 144: For an owner or occupier of any place to use the place, or cause or permit the place to be used, as a waste facility without lawful authority. ▪ Section 144AA: To supply information about waste to another person in the course of dealing with the waste, that is false or misleading, in a material respect.	Mitigation measures incorporated for use of appropriately licenced waste facilities/transporters and records to be maintained – Section 4.1 and 4.4.
Protection of the Environment Operations (Waste) Regulation 2014	Requirements for the tracking of waste apply if the waste is of a type described in Parts 1 or 2 of Schedule 1. Part 4, Section 43: Imposes obligations on the consignor of waste to: ▪ Hold a consignment authorisation authorising the transportation of the waste from the place to the other place. ▪ Obtain a waste transport certificate for the waste and accurately complete and certify required parts. ▪ Give the waste transport certificate to the transporter of the waste.	Mitigation measures incorporated for use of appropriately licenced waste facilities/transporters and records to be maintained – Section 4.1 and 4.4. Project record keeping to be monitored – Section 5.1.

Legislation	Key Requirements	Implications for the CWMP
	▪ Ensure that the transporter holds an environment protection licence (if required by or under the Act) to transport the waste. ▪ Ensure that the waste facility to which the waste is to be transported can lawfully accept waste of the type concerned.	
	Part 9, Section 92: Provides exemptions relating to resource recovery. Resource recovery exemptions allow some wastes to be beneficially and safely re-used independent of the usual NSW laws that control applying waste to land, using waste as a fuel, or using waste in connection with a process of thermal treatment. Resource recovery exemptions are only appropriate if the re-use: ▪ Is genuine, rather than a means of waste disposal. ▪ Is beneficial or fit-for-purpose, and ▪ Will not cause harm to human health or the environment.	Mitigation measures consider Resource Recovery Exemptions – Sections 4.1 and 4.3.
	Part 11, section 112: A person who stores waste on premises (whether or not the waste was generated on the premises) must ensure that it is stored in an environmentally safe manner.	Mitigation measures incorporated for waste storage – Section 4.5.
Waste Avoidance and Resource Recovery Act 2001	Establishes the waste management hierarchy.	Management measures have been developed in accordance with the waste management hierarchy (Section 4).

2.2 Infrastructure Approval conditions

This Plan seeks to address the Infrastructure Approval conditions detailed in Table 2-2.

Table 2-2 Infrastructure Approval conditions relevant to waste and resource use

Reference	Requirement	Section of this CWMP
B17	The Proponent must store and handle all chemicals, fuels and oils in accordance with: (a) the requirements of all relevant Australian Standards; (b) within a bunded area with a minimum bund capacity of 110% of the volume of the largest single stored vessel within the bund; and (c) the NSW EPA's ***Storing and Handling of Liquids: Environmental Protection – Participants Handbook*** if the chemicals are liquids. In the event of an inconsistency between the requirements in (a) to (c) above, the most stringent requirement shall prevail to the extent of the inconsistency.	Section 4

Reference	Requirement	Section of this CWMP
B44	Any waste materials exposed or created in association with the construction works and proposed to be disposed of to an offsite location, must be classified in accordance with the EPA's ***Waste Classification Guidelines***.	Section 4
B45	Chemicals, fuels and oils used on-site must be kept in appropriately bunded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's ***Storing and Handling of Liquids: Environment Protection- Participants Manual*** (Department of Environment and Climate change, 2007).	Section 4
B46	Construction cannot commence until a copy of the Site Audit Statement that covers the site subject to the development is provided to the Secretary. The Site Audit Statement must demonstrate the site is suitable for the development. *Note: This condition has been included because the remediation of the site subject to the development is being carried out under a separate consent.*	Section 4
C1	Prior to commencing construction, the Proponent must prepare an Environmental Management Strategy for the development to the satisfaction of the Secretary. This strategy must: (e) include: construction and operational waste management plan, incorporating management of any contaminated materials disturbed during construction.	Section 4 Construction Environmental Management Strategy Section 8

Note – approval for staging of construction and operations has been approved by the Department, as such operations is not yet incorporated in this Plan.

2.3 Standards and guidelines

The main standards and guidelines relevant to this Plan include:

- NSW Waste and Resource Recovery Strategy 2014-21 (NSW EPA, 2014)
- NSW Government Resource Efficiency Policy (OEH, 2019)
- Waste Classification Guidelines (NSW EPA, 2014).

2.3.1 Waste classification

The Environment Protection Authority's *Waste Classification Guidelines* (EPA, 2014) provide a step-by-step process for classifying waste based on risks to the environment and human health. The classes of waste are defined in the *Protection of the Environment Operations Act 1997*, Schedule 1, clause 49. Waste classification groups are summarised in Table 2-3.

Table 2-3 Waste classification groups

Waste classification	Description
Special waste	Includes waste that has unique regulatory requirements such as asbestos or tyres and includes anything classified as special waste under an EPA gazettal notice.

Waste classification	Description
Liquid waste	Waste (excluding special waste) that has an angle of repose of less than 5 degrees above horizontal, becomes free-flowing at or below 60ºC or when it is transported, is generally not capable of being picked up by a spade or shovel or is classified as liquid waste under an EPA gazettal notice.
Hazardous waste	Hazardous waste (other than special waste or liquid waste) includes waste that is a dangerous good that is classified under the Transport of Dangerous Goods Code as a 'Class 1' to 'Class 8' type of waste. It can also include coal tar or coal tar pitch waste, lead-acid or nickel-cadmium batteries, lead paint waste or any mixture containing one of these types of wastes.
General solid waste (putrescible)	General solid waste (putrescible) (other than special waste, liquid waste, hazardous waste or restricted solid waste) includes standard household and litter bins waste that is collected by or on behalf of local councils, food waste, animal waste, manure and night soil and grit or screening from sewage treatment systems.
General solid waste (non-putrescible)	General solid waste (non-putrescible) (other than special waste, liquid waste, hazardous waste, restricted solid waste or General solid waste (putrescible)) includes household recyclable waste that does not contain food waste, garden waste, wood waste, waste that was previously in dangerous containers that have been thoroughly cleaned out, virgin excavated material and building and demolition waste.

3. Waste impacts

An initial environmental risk assessment has been undertaken for construction and commissioning of the Hunter Power Project in accordance with the process described in Section 5.1 of the CEMS.

3.1 Construction waste streams

The following waste streams have been identified for construction:

- Green waste
- Construction and demolition wastes
- Virgin excavated natural material
- Excess spoil
- Hazardous liquid wastes
- Packaging

The identified activities and potential impacts relevant to waste generation are summarised in Table 3-1. The waste classification of each waste source, and estimated volume generation during construction of the Project is presented in Table 3-1.

Table 3-1 Activities, aspects and potential impacts relevant to waste generation – Hunter Power Project construction

Activity	Waste type	Potential impact
Site clearing and grubbing including the removal of vegetation	▪ Generation of vegetation waste	▪ Increased waste from improper practices or failure to implement waste hierarchy
Excavation and piling	▪ Generation of liquid waste (extracted groundwater)	▪ Inappropriate classification or disposal of extracted groundwater leading to regulatory non-compliance or environmental harm
Bulk earthworks	▪ Generation of virgin excavated natural material (VENM)	▪ Increased waste from improper practices or failure to implement waste hierarchy
	▪ Generation of excess spoil	▪ Excess volumes of excavated material requiring storage, treatment or disposal
		▪ Incorrect classification or treatment of potentially contaminated soils leading to regulatory non-compliance or environmental harm
Demolition and power station construction	▪ Generation of inert construction waste	▪ Increased waste from improper practices or failure to implement waste hierarchy
		▪ Excessive waste directed to landfill
	▪ Generation of hazardous liquid wastes	▪ Inappropriate disposal of hazardous wastes leading to regulatory non-compliance or environmental harm
	▪ Resource consumption (fuel and power)	▪ Reduced resource availability
		▪ Greenhouse gas emissions due to consumption of energy from non-renewable sources

Activity	Waste type	Potential impact
Compound and workshop operation	▪ Packaging materials including scrap metals timber and cardboard	▪ Increased waste from improper practices or failure to implement waste hierarchy
General office/administration, amenities including food and human waste	▪ Generation of office waste	▪ Increased waste from improper practices or failure to implement waste hierarchy
	▪ Generation of food and domestic waste	▪ Litter from inappropriate disposal of domestic waste from construction personnel
	▪ Generation of grey and septic waste	▪ Inappropriate disposal of grey and septic wastes leading to regulatory non-compliance or environmental harm
Operation of Temporary Workforce Accommodation Facility (TWAF)	▪ Generation of food and domestic waste	▪ Litter from inappropriate disposal of domestic waste from TWAF personnel and occupants
	▪ Generation of grey and septic waste	▪ Inappropriate disposal of grey and septic wastes leading to regulatory non-compliance or environmental harm
Storage of waste on site	▪ Emissions to air, land and water	▪ Pollution of soils, groundwater and surface water
		▪ Dust or odour pollution
		▪ Littering
	▪ Classification and segregation of waste	▪ Cross contamination of wastes
		▪ Reduction in re-use of materials
Waste transport and disposal	▪ Unlicenced waste contractor's transporting waste	▪ Regulatory non-compliance
		▪ Potential illegal dumping of waste

3.2 Commissioning waste streams

The following waste streams have been identified for commissioning:

- Trade wastewater:
  - Gas turbine compressor wash water
  - Gas turbine evaporative cooler water blowdown
  - Demineralised water plant regeneration wastewater
  - Oily water drains that collect runoff from diesel fuel storage and unloading bunds, transformer bunds and workshops
  - Wastewater from chemical bund drains
- Municipal sewage
- General waste, including office-based waste, paper, cardboard, plastics, kitchen and bathroom waste
- Hazardous material or chemical waste.

Given the short duration of commissioning, the main waste stream likely to be generated during this phase is trade wastewater. Snowy Hydro will enter into a trade waste agreement with Hunter Water that allows for the liquid waste streams generated at the project site that are listed above as trade wastewater to be discharged into the existing sewerage system. The trade wastewater agreement identifies the quality requirements of the trade waste.

4. Management and mitigation measures

A range of environmental requirements are identified in the associated environmental documents, including legislation, the EIS and Infrastructure Approval conditions. Specific measures and requirements to address waste and resource consumption during construction and commissioning are outlined in this section.

These measures are presented in this section within the framework of the waste management hierarchy (Figure 4-1).

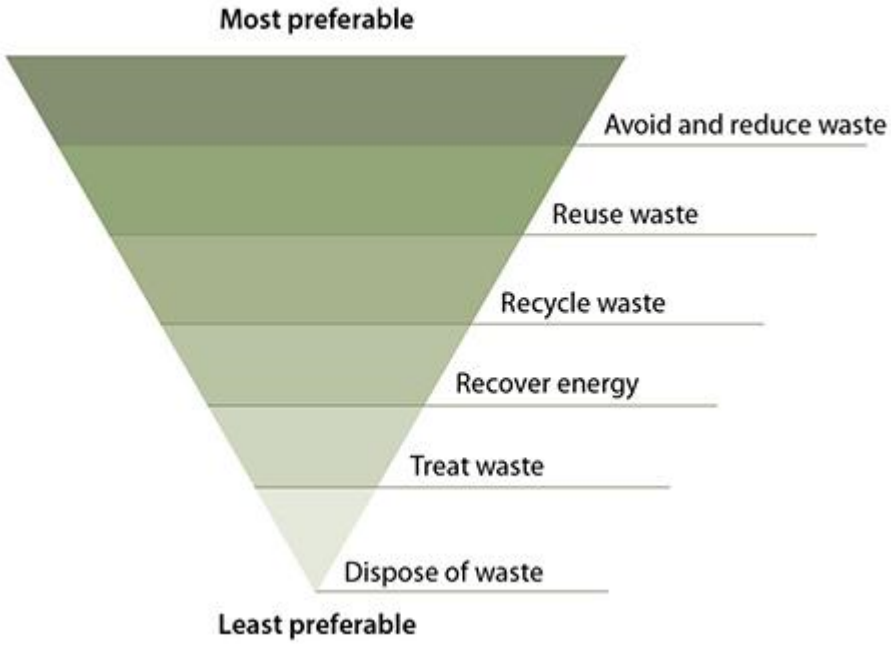

Figure 4-1 Waste management hierarchy (NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (EPA 2014))

4.1 General

General requirements to mitigate the effects of waste generation and effectively implement the waste hierarchy are outlined below.

Overarching requirements for the management of waste include the following commitments:

- To ensure all waste chemicals, fuels and oils associated with construction and commissioning are handled and stored in accordance with all relevant Australian Standards.
- The handling and storage of any hazardous liquid waste will be carried out in accordance with the NSW EPA's requirements, which are documented in *Storing and Handling Liquids: Environmental Protection – Participant's Manual* (Department of Environment and Climate Change, 2007).

Where there is an inconsistency between Australian Standards and the NSW EPA requirements, the most stringent requirement shall prevail to the extent of the inconsistency.

General mitigation measures to manage waste are detailed in Table 4-1.

Table 4-1 General mitigation measures to manage waste

Mitigation Ref	Action / requirement	Responsibility
W1	The Principal Contractor is to be informed of the project specific requirements included in this Plan.	Snowy Hydro
W2	The site induction will inform all site personnel about the site-specific waste management procedures based on the waste management hierarchy.	Principal Contractor
W3	All work areas will be maintained in a neat and tidy condition. Covered bins for different waste streams will be used at all times and regular emptying will minimise the accumulation of litter on site.	Principal Contractor
W4	The following information will be required and provided to Snowy Hydro for information: ▪ Waste management contractors to maintain and document (via monthly reports) the types and volumes of wastes collected, recycled and disposed of. ▪ Copies of licences or licence numbers (under the ***Waste Avoidance and Resource Recovery Act 2001***) for transporters of industrial/hazardous waste.	Principal Contractor
W5	The relevant licences of waste treatment and disposal facilities utilised for the disposal of project waste will be obtained (on a regular basis if necessary) to ensure they are legally able to accept that waste and provided to Snowy Hydro for information.	Principal Contractor
W6	Waste sampling is to occur when waste is being transported offsite to determine if it can be reused on another construction site or project or whether disposal is required, and the waste classification. In general, waste sampling will be in accordance with NSW EPA "Waste Classification Guidelines" or the relevant Resource Recovery Exemption (refer to Appendix B).	Principal Contractor

4.2 Prevention (avoid and reduce waste)

The measures detailed in Table 4-2 will be implemented to prevent the creation of excessive waste during construction and commissioning. These measures typically occur during design, construction and commissioning planning and procurement activities.

Table 4-2 Mitigation measures to avoid or reduce waste

Mitigation Ref	Action / Requirement	Responsibility
W7	Detailed determination of types and quantities of packaging materials required prior to ordering/purchasing to minimise wastage.	Principal Contractor
W8	Procurement of materials to favour suppliers who can reduce bulk packaging and minimise waste generation.	Principal Contractor
W9	Proactive coordination of site activities (where possible) to minimise waste by utilising unused materials.	Principal Contractor
W10	Earthworks to minimise the demand for imported fill or the need to export/dispose of excess spoil.	Principal Contractor
W11	Store supplies in a secure location that is protected from the weather.	Principal Contractor
W12	Laydown areas to be kept tidy and organised so that items stored are not damaged and can be readily and safely accessed when needed.	Principal Contractor

4.3 Reuse and recycling

When avoiding or reducing waste is not possible, the measures outlined in Table 4-3 will be implemented so that waste can be reused on site or off site for the same or a similar use or recovered through recycling and reprocessing into a non-waste product. Waste separation and segregation will be promoted on site to facilitate effective reuse and recycling.

Table 4-3 Mitigation measures to manage reuse or recycling of waste

Ref	Action / Requirement	Responsibility
W13	Construction waste materials, including spoil and demolition waste, will be separated on site into dedicated bins / areas for either reuse on site or collection by a waste contractor and transport to offsite facilities.	Principal Contractor
W14	Waste within site offices will be segregated on site with colour coded bins being provided for mixed recyclable, organic waste, landfill and paper.	Principal Contractor
W15	Where possible, reuse excavated materials as fill on other parts of the Project in preference to off-site beneficial re-use or disposal in accordance with NSW EPA "Waste Classification Guidelines".	Principal Contractor
W16	Where re-use onsite is not possible, waste will be beneficially reused or recycled offsite in accordance with relevant approvals in preference to disposal. This may occur through the following pathways and in compliance with appropriate legislation: ▪ Resource recovery orders and exemptions as referenced in Section 2.1 of this Plan ▪ Appropriately approved recycling facility ▪ Appropriately approved developments which can accept waste using a notice under Section 143(3A) of the POEO Act (s.143 Notice).	Principal Contractor

4.4 Waste disposal

The measures in Table 4-4 will be implemented to manage waste disposal activities during construction and commissioning. Waste disposal is the least preferred management approach in the waste hierarchy and will be applied only where necessary.

Table 4-4 Mitigation measures to manage waste disposal

Ref	Action / Requirement	Responsibility
W17	All waste (including contaminated spoil) requiring off-site disposal will be classified and disposed of in accordance with the NSW EPA "Waste Classification Guidelines". Wastes that are unable to be reused or recycled will be disposed of offsite at a licensed waste management facility, or premises lawfully permitted to accept the materials following classification. Ensure NSW EPA waste tracking and licencing requirements are complied with.	Principal Contractor
W18	Regular audits of waste facility receipts will be undertaken, and cross referenced with the waste facility. Details of waste types, volumes and destinations are to be recorded in the Waste Management Register.	Principal Contractor

4.5 Waste handling and storage

The measures in Table 4-5 apply where waste is required to be handled and stored on site prior to re-use or off-site recycling or disposal. These measures are required to provide effective segregation of wastes and prevent waste from escaping into the environment.

Table 4-5 Mitigation measures for waste handling and storage

Ref	Action / Requirement	Responsibility
W19	All stored wastes to be identified and labelled during storage at the site.	Principal Contractor
W20	Spoil, topsoil and mulch are to be stockpiled onsite in allocated areas, where appropriate, and mitigation measures for dust control and surface water management will be implemented as per the CEMS.	Principal Contractor
W21	Liquid wastes are to be stored in appropriate containers in bunded areas until transported offsite. Bunded areas will have the capacity to hold 110 per cent of the liquid waste volume for bulk storage or 120 per cent of the volume of the largest container for smaller packaged storage.	Principal Contractor
W22	Hazardous waste will be stored in bunded storage facilities at all compound areas.	Principal Contractor
W23	All other recyclable or non-recyclable wastes are to be stored in appropriate covered containers (e.g. bins or skips) in appropriate locations onsite and contractors commissioned to regularly remove/empty the bins to approved disposal or recycling facilities.	Principal Contractor
W24	Bunded areas will comply with the Department of Environment and Conservation ***Liquid Waste Fact Sheet – Storing liquid waste*** (Oct 2005).	Principal Contractor

4.6 EIS commitments

The measures in Table 4-6 are the commitments made as mitigation measures in the EIS for waste management.

Table 4-6 Mitigation measures to manage waste as detailed in the EIS

EIS Ref	Mitigation measures	Timing
W1	A Construction Waste Management Plan (CWMP) will be developed and implemented prior to construction commencement. This will include consideration of a waste management hierarchy, mitigation strategies (avoidance, mitigation, reuse, recycle or disposal), use of materials with minimal packaging requirements, removal of packaging offsite and fabrication of parts offsite and appropriate segregation of any waste materials.	Construction
W2	An Operational Waste Management Plan (OWMP) will be developed and implemented prior to operational commencement. The OWMP will be implemented with consideration of a hierarchical waste management approach, mitigation strategies (avoidance, mitigation, reuse, recycle or disposal), appropriate segregation of any waste materials and a plan to collect general solid waste and hazardous waste from the Proposal Site.	Operation
W3	Any waste that cannot be recovered or recycled will be sorted and taken to a licensed treatment or disposal facility where it will be treated and disposed of according to its classification.	Construction and operation
W4	An audit regime will be implemented, in accordance with the Proponent's Health and Safety Environmental Management System during construction and operation which includes (but not limited to) quantities of waste, storage areas and contractor services.	Construction and operation

Note – approval for staging of the CWMP and OWNP has been approved by the Department, as such operations is not yet incorporated in this Plan for implementation. The operational commitments in the table above are included for completeness.

4.7 Classification of waste streams

The classification of waste streams is to be done in accordance with the six-step process described in the EPA *Waste Classification Guidelines Part 1: Classifying Waste* (2014) – see Figure 4-2 to Figure 4-4and Appendix A (definitions).

Step 1: Is the waste special waste? *Special waste has a unique set of regulatory requirements due to its risk to the environment.*	• Clinical and relate waste • Asbestos waste • Waste tyres • Anything classified as special waste under an EPA gazettal	→	**YES, SPECIAL WASTE ONLY** — No further assessment of the waste is required **YES, BUT IT' MIXED WITH RESTRICTED SOLID OR HAZARDOUS WASTE** — The waste must be classified as special waste and restricted solid or hazardous waste (as applicable) **NO** — Proceed to Step 2
Step 2: Is the waste liquid waste?	• has an angle of repose of less than 5 degrees above horizontal • becomes free-flowing at or below 60ºC or when it is transported • is generally not capable of being picked up by a spade or shovel • is classified as liquid waste under an EPA gazettal notice.	→	**YES, LIQUID WASTE ONLY** — No further assessment of the waste is required **YES, BUT THERE IS A SOLID FRACTION** — The waste generator may choose separate out the solid fraction, which can be further classified **NO** — Proceed to Step 3
Step 3: Is the waste pre-classified by the EPA?	Gazetted waste pre-classifications: • Hazardous waste • Restricted solid waste • General solid waste (putrescible) • General solid waste (non-putrescible) • under an EPA gazettal notice. Refer to EPA website for updates: • Managing industrial waste (nsw.gov.au)	→	**YES** — No further assessment of the waste is required **NO** — Proceed to Step 4

Figure 4-2 Steps 1 to 3 of the six-step process to classify waste streams (EPA 2014)

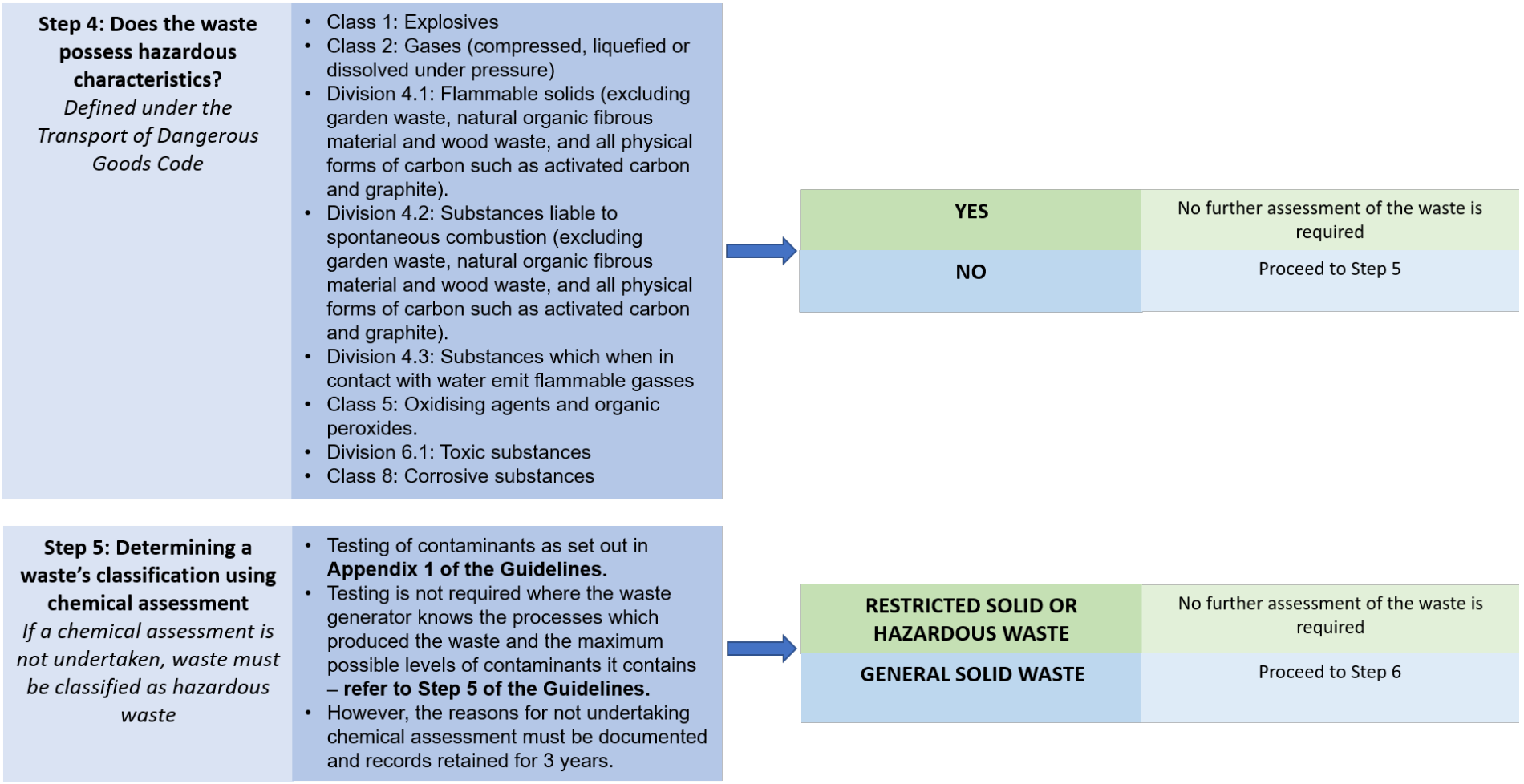

Figure 4-3 Steps 4 to 5 of the six-step process to classify waste streams (EPA 2014)

Step 6: Is the waste putrescible or non-putrescible? *If further assessment is not undertaken, the waste must be classified as general solid waste (putrescible).* *Wastes typically not classified as putrescible: soils, timber, garden trimmings, vegetative materials.*	General solid waste is classified as non-putrescible waste if: • it does not readily decay under standard conditions, does not emit offensive odours and • does not attract vermin or other vectors (such as flies, birds and rodents), or • it has a specific oxygen uptake of less than 1.5 milligrams O_2 per hour per gram of total organic solids at 20 degrees Celsius, or • it is such that, during composting (for the purpose of stabilisation), the mass of volatile solids in the organic waste has been reduced by at least 38%, or • it has been treated by composting for at least 14 days, during which time the temperature of the organic waste must have been greater than 40 degrees Celsius and the average temperature greater than 45 degrees Celsius. Non-putrescible materials typically do not: • readily decay under standard conditions • emit offensive odours • attract vermin or other vectors (such as flies, birds and rodents).

Putrescible	No further assessment of the waste is required
Not putrescible	No further assessment of the waste is required

Figure 4-4 Step 6 of the six-step process to classify waste streams (EPA 2014)

4.8 Classification of potential project waste streams

The types of wastes expected to be generated during construction and commissioning of the Project are shown in Table 4-7.

Table 4-7 Classification of Project waste streams

Waste Type	Waste Classification	Destination (Re-Use, Recycle or Dispose)
Vegetation	General solid waste (non-putrescible)	▪ Cleared vegetation will be reused or recycled to the greatest extent practicable via mulching or chipping and reapplication on site in landscaping and vegetation. ▪ Offsite disposal of excess mulch in accordance with the Mulch Exemption/Order 2016 or disposal to licensed waste disposal facility.
Surplus soil - Virgin excavated natural material (VENM)	General solid waste (non-putrescible)	▪ Balance cut and fill earthworks, where possible, to minimise waste generation. ▪ Waste soil tested and classified. ▪ Soil generated on site classified as VENM may be used in landscaping on site. ▪ Where an excavated material cannot be classified as VENM, it may be eligible for re-use the Excavated Material Exemption/Order 2014. ▪ Investigate potential to treat and validate contaminated soil on site. If this cannot be done, contaminated soils transported to waste facility licensed by the EPA to accept the class of waste.
Surplus soil – Excavated natural material (ENM)	General solid waste (non-putrescible)	
Contaminated soil	Hazardous	
Inert construction and demolition waste	General solid waste (non-putrescible)	▪ Separation for re-use/recycling on-site or send offsite for recycling. ▪ Collection by licensed waste contractor for offsite disposal.
Hazardous liquid waste	Liquid waste	▪ Liquid waste will be stored in appropriate bunded containers in locked storage areas and removed off-site to a licensed waste facility.
Groundwater extracted from excavations	Liquid waste	▪ Liquid waste will be stored in appropriate bunded containers in locked storage areas and removed off-site to a licensed waste facility.
Packaging materials	General solid waste (non-putrescible)	▪ Collection by licensed waste contractor for offsite disposal
Office waste	General solid waste (non-putrescible)	▪ Recycled off-site (co-mingled recycling). ▪ Collection of non-recyclables by licensed waste contractor for offsite disposal.

Waste Type	Waste Classification	Destination (Re-Use, Recycle or Dispose)
Food waste	General solid waste (putrescible)	▪ Collection by licensed waste contractor for offsite disposal.
Grey and septic wastewater	Liquid waste	▪ To be managed as trade waste under agreement with Hunter Water Corporation.
Gas turbine compressor wash waste Oily water separator waste	Liquid waste	▪ To be managed as trade waste under agreement with Hunter Water Corporation.

5. Compliance management

This section describes the environmental monitoring and reporting required to demonstrate the environmental performance of the Project compared to objectives and targets.

5.1 Monitoring and reporting

Monitoring and inspection of CWMP management activities will be undertaken in accordance with Table 5-1, by the Principal Contractor.

Table 5-1 Waste management monitoring plan

Type of monitoring	Frequency	Location	Responsibility	Records
Environmental inspection – ▪ Implementation of waste management activities. ▪ Site neat, tidy, and free of litter. ▪ Stockpiled and segregated waste collection points clearly signposted and collection adequate. ▪ Quantities of stored materials are appropriate based on construction scheduling/procurement constraints.	Weekly	Active construction areas and waste storage areas	Principal Contractor	Weekly environmental inspection checklist
Monthly review of records – ▪ Waste Management Register is being maintained monthly.	Monthly	NA	Principal Contractor	Daily site diary Waste management register Disposal dockets
Environmental audit - Any environmental incidents arising from waste management activities have been reported and investigated in accordance with the Principal Contractor's Environmental Incident procedure.	As per Project Audit schedule	NA	Principal Contractor	Environmental incident report
Environmental audit - ▪ Tracking and reporting of all waste is undertaken in accordance with the NSW EPA waste classification guidelines. ▪ Waste facility receipts are maintained.	As per Project Audit schedule	NA	Principal Contractor	Environmental audit report

Type of monitoring	Frequency	Location	Responsibility	Records
Close-out of waste management incidents – lessons are disseminated to project personnel	As required	NA	Principal Contractor	Toolbox records Pre-start records

5.1.1 Waste management register

A Waste Management Register of all waste collected for disposal and/or recycling will be maintained monthly until final completion. As a minimum, the register will include:

- Date of waste collection
- Waste type
- Waste classification
- Quantity
- Management method (re-use, re-cycle, disposal etc.)
- Waste contractor.

5.2 Auditing

Audits will be undertaken to assess the effectiveness of environmental controls, compliance with the CWMP and relevant Infrastructure Approval conditions. Audits will be undertaken in accordance with the overarching CEMS.

Review of this CWMP will be undertaken in accordance with the overarching CEMS.

5.3 Training and induction requirements

Environmental training, inductions, and awareness are key activities to be conducted by the Principal Contractor to ensure all staff working on the Project are aware of environmental risks associated with construction and commissioning, and their individual obligations.

Environmental training and awareness activities that will be conducted for staff and contractors include:

- General environmental training and awareness
- Specialised environmental training
- Site awareness induction conducted
- Short-term workers induction
- Toolbox talks
- Targeted environmental awareness training
- Daily pre-start meetings.

A training needs and competency evaluation will also be completed, and training conducted for all personnel, contractors, and visitors to the Project Site.

Further detail on training and inductions are provided in section 7.3 of the CEMS.

5.4 Staging and review of management plans

The Department's approval for the staging of management plans into construction and operation phases was provided on 22 December 2021 and is appended to this Plan.

Regular reviews of management documentation will also occur and after certain events. The triggers for further review of this Management Plan include:

(a) the submission of an incident report under condition C6;

(b) the submission of an audit report under conditions C15 to C19;

(c) the approval of any modification to the conditions of this approval;

(d) a direction of the Secretary (Department of Planning Industry and Environment) under condition A2 of Schedule 2;

(e) as initiated by the Principal Contractor or Snowy Hydro; or

(f) upon the advice of the Environmental Representative.

Where revisions are made, then within 4 weeks of the review the revised document will be submitted to the Secretary for approval, unless otherwise agreed with the Secretary, or within the scope of the Environmental Representative role as set out in condition A23.

5.5 Review and improvement

The CEMS and associated plans will be regularly reviewed as part of a continual improvement process to ensure they remain current and relevant to the Project.

It is the Principal Contractor's responsibility to advise Snowy Hydro when a change to the CEMS or plan is required to enable the Project to continue or improve. Where an amendment is required, this will be made by Snowy Hydro and if required, agreed with the Department, prior to the work that it relates to is conducted. The exact wording of condition of approval C5 is used below under 'Trigger events and CEMS review'.

Throughout the construction and commissioning of the Project, the Principal Contractor will communicate to Snowy Hydro any proposed changes to their own environmental management documentation which may necessitate an amendment to the overall CEMS. In this case the Environmental Representative will also be consulted regarding the potential change.

It is a requirement that the CEMS and all associated plans are reviewed and updated within three months of the following events:

- The submission of an environmental incident report
- The submission of an audit report
- The approval of any modification to the conditions of the Infrastructure Approval
- A direction of the Secretary.

Condition C22 provides for the Secretary to approve a revised strategy or plan required under the conditions of approval, or the stage submission of these documents, at any time. With the approval of the Secretary, Snowy Hydro may prepare the revised or staged strategy or plan without undertaking consultation with all parties nominated under the applicable.

It is recommended that a non-routine review of the CEMS and all plans occur within 3 months of the following:

- Practical completion of a significant stage of construction works
- A significant change in site conditions
- A change in the applicable laws, approvals, EPL or Infrastructure Approval conditions
- If a new, major sub-contractor begins working on site
- If requested by the Principal Contractor or Snowy Hydro.

5.6 Incident notification

The Principal Contractor will notify Snowy Hydro upon becoming aware of an incident, and Snowy Hydro will then notify the Secretary in writing via the Major Projects website immediately.

The key aspects the notification will address are:

(a) the development and application number (12590060);

(b) details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);

(c) how the incident was detected;

(d) when Snowy Hydro became aware of the incident;

(e) any actual or potential non-compliance with conditions of approval;

(f) what immediate steps were taken in relation to the incident;

(g) further action(s) that will be taken in relation to the incident; and

(h) a development contact for further communication regarding the incident. Unless otherwise stated in the incident notification, this is the Snowy Hydro HPP Environment Manager on 0488 785 137.

5.7 Non-compliance notification

In the instance of a non-compliance, the Secretary will be notified in writing via the Major Projects website within seven days of Snowy Hydro becoming aware of any non-compliance. Snowy Hydro will lodge the notification.

The Principal Contractor must notify Snowy Hydro whenever it is aware of a non-compliance.

The key aspects that a non-compliance notification will address are:

(a) the development and application number (12590060);

(b) the condition of approval that the development is non-compliant with;

(c) the way in which the development does not comply;

(d) the reasons for the non-compliance (if known); and

(e) the corrective and preventative actions undertaken to address the non-compliance.

For clarity, a non-compliance which has already been notified as an incident does not need to also be notified as a non-compliance to the Major Projects website.

5.8 Compliance reporting

Compliance Reports of the Project will be carried out by Snowy Hydro with the support of the Principal Contractor, and also upon the advice of the Environmental Representative where applicable. Reporting is to be in accordance with, and upon the timing set out in, the *Compliance Reporting Post Approval Requirements* (Department of Planning, Industry and Environment, 2020) or subsequent version.

Snowy Hydro must make each Compliance Report publicly available within 60 days of submitting it to the Secretary.

There is an opportunity to request and agree an alternative reporting method and timing with the Secretary to those identified in this section. If sought, this is to be done by Snowy Hydro in consultation with the Department.

5.9 Complaints and enquiries management

An enquiry is defined as a question or request for information.

A complaint is defined as a statement that describes Project related activities as unsatisfactory or unacceptable. Complaints may also be accompanied by threats to contact the media, local Member of Parliament, or some other authority.

Complaints and enquiries may be received by any method. The Communications and Stakeholder Engagement Manager (CSEM) will acknowledge and respond to enquiries and complaints about the Project, as per the process and timeframes shown in Table 5-2. Where the complaint rises to the level of a dispute it shall be manged in accordance with the steps outlined in Section 6.3 in the Construction Environmental Management Strategy.

Table 5-2 Complaints and enquiries management

Complaints and enquiries management	
Responding to complaints received during standard work hours	▪ Investigate and determine source of complaint immediately ▪ Provide an oral response acknowledging receipt of complaint to complainant as soon as possible. Every effort will be made to respond within 24 hours for emails, or one week for letters ▪ Investigate the potential environmental impacts and consequences of the complaint ▪ Record details of complaint received, how it was managed and the actions required to close out the complaint ▪ Provide an update of the complaints register to the ER for any complaints received on the day they are received.
Responding to enquiries received during standard work hours	▪ Record details of enquiry received ▪ Provide a response to enquirer on the next business day.
Responding to enquiries and complaints out of hours	▪ Stakeholders will be provided with the Project phone number for specific complaints and enquiries related to works out of hours. This number will be monitored by the CSEM on a 24-hour basis ▪ The CESM will triage complaints and enquiries and liaise directly with the Principal Contractor to respond. Non-urgent enquiries and complaints will be dealt with on the next business day ▪ All details of the enquiry or complaint will be recorded in the Project consultation complaint register by the CSEM. ▪ Provide an update of the complaints register to the Environmental Representative for any complaints received on the day they are received.

6. References

Jacobs (2021). Hunter Power Project Environmental Impact Statement. Prepared for Snowy Hydro Limited, 22 April 2021

NSW EPA (2014). NSW Waste Avoidance and Resource Recovery Strategy 2014-21 (NSW EPA, 2014)

NSW EPA (2014). Waste Classification Guidelines (NSW EPA 2014).

Office of Environment and Heritage (2014). NSW Government Resource Efficiency Policy (OEH 2014)

Ramboll (2016). Environmental Impact Statement, Former Hydro Aluminium Kurri Kurri Smelter Remediation and Demolition Project, July 2016.

Ramboll (2016). Remedial Action Plan Hydro Aluminium Smelter Kurri Kurri Smelter, July 2016

Appendix A. Waste classification definitions

Source: EPA Waste Classification Guidelines Part 1, 2014

A.1 Special waste

A.1.1 Clinical and related waste

Clinical and related waste means:

- clinical waste
- cytotoxic waste
- pharmaceutical, drug or medicine waste
- sharps waste.

A.1.2 Asbestos waste

Asbestos means the fibrous form of those mineral silicates that belong to the serpentine or amphibole groups of rock-forming minerals, including actinolite, amosite (brown asbestos), anthophyllite, chrysotile (white asbestos), crocidolite (blue asbestos) and tremolite.

Asbestos waste means any waste that contains asbestos.

A.1.3 Waste tyres

Waste tyres means used, rejected or unwanted tyres, including casings, seconds, shredded tyres or tyre pieces.

A.2 Pre-classified waste

A.2.1 Hazardous waste

The following waste types (other than special waste or liquid waste) have been pre-classified by the EPA as 'hazardous waste':

- containers, having previously contained a substance of Class 1, 3, 4, 5 or 8 within the meaning of the Transport of Dangerous Goods Code, or a substance to which Division 6.1 of the Transport of Dangerous Goods Code applies, from which residues have not been removed by washing2 or vacuuming
- coal tar or coal tar pitch waste (being the tarry residue from the heating, processing or burning of coal or coke) comprising of more than 1% (by weight) of coal tar or coal tar pitch waste
- lead-acid or nickel-cadmium batteries (being waste generated or separately collected by activities carried out for business, commercial or community services purposes)
- lead paint waste arising otherwise than from residential premises or educational or child care institutions
- any mixture of the wastes referred to above.

Transport of Dangerous Goods Code means the document called the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), approved by the Ministerial Council for Road Transport and published by the Commonwealth Government from time to time.

A.2.2 Restricted solid waste

Currently, no wastes have been pre-classified by the EPA as 'restricted solid waste'.

Restricted solid waste therefore currently only includes wastes assessed and classified as restricted solid waste in accordance with the procedures in Step 5 of this guide.

A.2.3 General solid waste (putrescible)

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

- household waste that contains putrescible organics
- waste from litter bins collected by or on behalf of local councils
- manure and night soil
- disposable nappies, incontinence pads or sanitary napkins
- food waste
- animal waste
- grit or screenings from sewage treatment systems that have been dewatered so that the grit or screenings do not contain free liquids
- any mixture of the wastes referred to above.

In assessing whether waste has been pre-classified as general solid waste (putrescible), the following definitions apply:

Animal waste includes dead animals and animal parts and any mixture of dead animals and animal parts.

Food waste means waste from the manufacture, preparation, sale or consumption of food but does not include grease-trap waste.

Manure includes any mixture of manure and biodegradable animal bedding, such as straw.

A.2.4 General solid waste (non-putrescible)

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

- glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal
- paper or cardboard
- household waste from municipal clean-up that does not contain food waste
- waste collected by, or on behalf of, local councils from street sweepings
- grit, sediment, litter and gross pollutants collected in, and removed from, stormwater treatment devices and/or stormwater management systems, that has been dewatered so that they do not contain free liquids
- grit and screenings from potable water and water reticulation plants that has been dewatered so that it does not contain free liquids
- garden waste
- wood waste
- waste contaminated with lead (including lead paint waste) from residential premises or educational or child care institutions

- containers, previously containing dangerous goods, from which residues have been removed by washing3 or vacuuming
- drained oil filters (mechanically crushed), rags and oil-absorbent materials that only contain non-volatile petroleum hydrocarbons and do not contain free liquids
- drained motor oil containers that do not contain free liquids
- non-putrescible vegetative waste from agriculture, silviculture or horticulture
- building cavity dust waste removed from residential premises or educational or child care institutions, being waste that is packaged securely to prevent dust emissions and direct contact
- synthetic fibre waste (from materials such as fibreglass, polyesters and other plastics) being waste that is packaged securely to prevent dust emissions, but excluding
- asbestos waste
- virgin excavated natural material
- building and demolition waste
- asphalt waste (including asphalt resulting from road construction and waterproofing works)
- biosolids categorised as unrestricted use, or restricted use 1, 2 or 3, in accordance with the criteria set out in the Biosolids Guidelines (EPA 2000)
- cured concrete waste from a batch plant
- fully cured and set thermosetting polymers and fibre-reinforcing resins
- fully cured and dried residues of resins, glues, paints, coatings and inks
- any mixture of the wastes referred to above.

In assessing whether waste has been pre-classified as general solid waste (non-putrescible), the following definitions apply:

Building and demolition waste means unsegregated material (other than material containing asbestos waste or liquid waste) that results from:

- the demolition, erection, construction, refurbishment or alteration of buildings other than
- chemical works
- mineral processing works
- container reconditioning works
- waste treatment facilities
- the construction, replacement, repair or alteration of infrastructure development such as roads, tunnels, sewage, water, electricity, telecommunications and airports

and includes materials such as:

- bricks, concrete, paper, plastics, glass and metal
- timber, including unsegregated timber, that may contain timber treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP)

but does not include excavated soil (for example, soil excavated to level off a site prior to construction or to enable foundations to be laid or infrastructure to be constructed).

Garden waste means waste that consists of branches, grass, leaves, plants, loppings, tree trunks, tree stumps and similar materials, and includes any mixture of those materials.

Virgin excavated natural material means natural material (such as clay, gravel, sand, soil or rock fines):

- that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities
- that does not contain sulfidic ores or soils, or any other waste,

and includes excavated natural material that meets such criteria for virgin excavated natural material as may be approved from time to time by a notice published in the NSW Government Gazette.

Wood waste means sawdust, timber offcuts, wooden crates, wooden packaging, wooden pallets, wood shavings and similar materials, and includes any mixture of those materials, but does not include wood treated with chemicals such as copper chrome arsenate (CCA), high temperature creosote (HTC), pigmented emulsified creosote (PEC) and light organic solvent preservative (LOSP).

Appendix B. Resource recovery exemptions

The general resource recovery exemptions that may be applicable to this work are defined below and summarised in Table B-1. These are general gazette orders and exemptions that do not require approval.

Current orders and exemptions in force in NSW are reported on the NSW EPA website: https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption

Prior to utilising these exemptions, the waste needs to be adequately classified using the *Waste Classification Guidelines* to make sure that the waste meets the requirements This may include sampling and testing for example to prove that the material is excavated natural material.

Once classified, these exemptions may be used to enable the reuse of waste rather than disposing of it at a licenced facility. A specific exemption may be granted where an application is made to the EPA.

Table B-1 Resource recovery exemptions

Exemption/order	General conditions
The excavated natural material exemption 2014	▪ The chemical concentration or other attributes of the excavated natural material listed in the Excavated Natural Material Exemption must not be exceeded. ▪ The excavated natural material can only be applied to land as engineering fill or used in earthworks. ▪ Excavated natural material handling, processing and testing requirements are outlined in detail in the exemption.
The mulch exemption 2016	▪ The raw mulch can only be applied to land for the purposes of filtration or as a soil amendment material or used either singularly or in any combination as input material(s) to a composting process. ▪ The consumer must apply the raw mulch to land within a reasonable period of time.