

GLOBAL POWER GENERAL AUSTRALIA PTY LTD

# PALING YARDS WIND FARM PROJECT

## WASTE MANAGEMENT PLAN

AUGUST 2022

CONFIDENTIAL



# Question today *Imagine tomorrow* Create for the future

## Paling Yards Wind Farm Project Waste Management Plan


Global Power General Australia Pty Ltd

### WSP

Level 15, 28 Freshwater Place  
Southbank VIC 3006

Tel: +61 3 9861 1111  
Fax: +61 3 9861 1144  
wsp.com

| REV | DATE           | DETAILS       |
|-----|----------------|---------------|
| 0   | 19 July 2022   | Final         |
| 1   | 15 August 2022 | Amended Final |

|              | NAME         | DATE           | SIGNATURE                                                                            |
|--------------|--------------|----------------|--------------------------------------------------------------------------------------|
| Prepared by: | Garrett Hall | 10 August 2022 |                                                                                      |
| Reviewed by: | Bruce Dawson | 10 August 2022 |                                                                                      |
| Approved by: | Garrett Hall | 15 August 2022 |  |

WSP acknowledges that every project we work on takes place on First Peoples lands.  
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

This document may contain confidential and legally privileged information, neither of which are intended to be waived, and must be used only for its intended purpose. Any unauthorised copying, dissemination or use in any form or by any means other than by the addressee, is strictly prohibited. If you have received this document in error or by any means other than as authorised addressee, please notify us immediately and we will arrange for its return to us.



# TABLE OF CONTENTS

|     |                                                            |    |
|-----|------------------------------------------------------------|----|
|     | ABBREVIATIONS .....                                        | ii |
| 1   | INTRODUCTION .....                                         | 1  |
| 1.1 | PROJECT BACKGROUND .....                                   | 1  |
| 1.2 | OPERATIONAL LIFE AND DECOMMISSIONING .....                 | 1  |
| 1.3 | OBJECTIVES .....                                           | 1  |
| 2   | LEGISLATIVE FRAMEWORK .....                                | 3  |
| 2.1 | GUIDANCE MATERIAL .....                                    | 3  |
| 2.2 | WASTE MANAGEMENT HIERARCHY .....                           | 4  |
| 3   | PROJECTED WASTE STREAMS .....                              | 5  |
| 4   | WASTE MANAGEMENT CONTROLS .....                            | 9  |
| 4.1 | GENERAL WASTE AND RECYCLABLES<br>MANAGEMENT MEASURES ..... | 9  |
| 4.2 | SPECIFIC WASTE MANAGEMENT MEASURES .....                   | 9  |
| 4.3 | TRANSPORT CONTROLS .....                                   | 12 |
| 4.4 | MONITORING, REVIEW, AND CONTINUOUS<br>IMPROVEMENT .....    | 13 |
| 4.5 | RECORD KEEPING .....                                       | 14 |
| 5   | REFERENCES .....                                           | 15 |
| 6   | LIMITATIONS OF THE REPORT .....                            | 16 |

## LIST OF TABLES

|           |                               |   |
|-----------|-------------------------------|---|
| TABLE 3.1 | PROJECTED WASTE STREAMS ..... | 5 |
| TABLE 4.1 | WASTE CONTROL MEASURES .....  | 9 |

## LIST OF FIGURES

|            |                                                                |   |
|------------|----------------------------------------------------------------|---|
| FIGURE 2.1 | WASTE MANAGEMENT HIERARCHY, OBTAINED<br>FROM EPA WEBSITE ..... | 4 |
|------------|----------------------------------------------------------------|---|

# ABBREVIATIONS

|       |                                                         |
|-------|---------------------------------------------------------|
| EPA   | Environment Protection Authority                        |
| GPGA  | Global Power Generation Australia                       |
| SEARs | Standard Secretary Environmental Assessment Requirement |
| WTG   | Wind Turbine Generator                                  |
| WMP   | Waste Management Plan                                   |
| EPA   | Environment Protection Authority                        |

# 1 INTRODUCTION

Global Power Generation Australia Pty Ltd (GPGA) has requested that WSP Pty Ltd (WSP) assist in the preparation of a Waste Management Plan (WMP) for the construction and operation of the Paling Yards Wind Farm Project (the Project), located in the NSW Central Tablelands Region, approximately 60 km south of Oberon and 60 km north of Goulburn.

This WMP outlines the waste management practices to be followed in the construction and operation of the Project; guiding onsite personnel to manage waste in a way that minimises risk to human health and the environment and maximises resource efficiency and recovery.

---

## 1.1 PROJECT BACKGROUND

The proposed Paling Yards Wind Farm will likely comprise of:

- Up to 47 wind turbines (WTGs).
  - An approximate maximum blade tip height of around 240m and maximum tower elevation of 150m.
  - Internal unsealed tracks for vehicle access to WTG and infrastructure.
  - Underground electrical and communication cable network linking WTGs to each other and the proposed onsite substation.
  - Wind farm and substation control room and facilities building.
  - An onsite electrical substation connected via a 9km of overhead powerline (10m in width) of up to 500kV to the Mt Piper to Bannaby 500kV transmission line (including control room and other associated grid connection facilities).
- 

## 1.2 OPERATIONAL LIFE AND DECOMMISSIONING

The operational life of the site is intended to be at least 30 years, with potential to extend the operational life depending on site and plant conditions. At the end of operation, the site will be decommissioned in accordance with the *Decommissioning and Rehabilitation Plan* (PS123149-POW-WIN RevB). The *Decommissioning and Rehabilitation Plan* outlines the recovery strategy for WTG tower materials (such as metallic components, blades etc.) however the management and disposal of decommissioning wastes must be undertaken in accordance with the controls outlined in this WMP.

In addition to regular servicing and maintenance, WTGs may be dismantled, in part or in whole, prior to broader site decommissioning and closure. These wastes will be considered decommissioning wastes and management of these decommissioning wastes will be subject to the *Decommissioning and Rehabilitation Plan* in addition to the controls outlined in this WMP.

---

## 1.3 OBJECTIVES

This WMP has been designed with the following principles and objectives:

- Describe the processes to be applied by GPGA in the handling, storage, reuse, transport, treatment, and disposal of wastes generated during the Project.
- Minimise risks to human health and the environment from the storage and handling of Project related wastes.
- Align with the waste management hierarchy (see Section 2.2 below), to minimise waste generation and maximise reuse and recycling of materials.

- Meet the requirements of waste generators under the *Protection of the Environment Operations Act 1997*, *Protection of the Environment Operations Regulations 2014* and the *Waste Avoidance and Resource Recovery Act 2001*.

## 2 LEGISLATIVE FRAMEWORK

In NSW, those who handle, store, transport, process, recycle and dispose of waste must minimise harm to human health and the environment. The legislative framework established in NSW to guide the management of waste consists of the following legislation:

### *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. The POEO Act:

- Defines waste for regulatory purposes
- Establishes management and licencing requirements for waste
- Defines offences relating to waste and set penalties.

The POEO Act also establishes other instruments to guide environmental management, such as the *Protection of the Environment Policies*, and the *Protection of the Environment Operations (Waste) Regulation 2014* (Waste Regulation).

### *PROTECTION OF THE ENVIRONMENT OPERATIONS REGULATIONS 2014*

The *Waste Regulation* provides a platform to allow the NSW Environment Protection Authority (EPA) to protect human health and the environment from waste related impacts. Amongst other things, the *Waste Regulation*:

- Outlines the NSW Waste Levy Disposal System.
- Provides for certain reporting and record-keeping requirements in relation to scheduled waste facilities and scheduled landfill sites.
- Exempts certain waste streams from the full waste tracking and recordkeeping requirements.
- Makes requirements relating to the transport of waste to interstate destinations.
- Imposes requirements on brand owners and retailers to recover, re-use and recycle packaging.
- Makes it an offence to apply, or to cause or permit the application of, residue waste to land that is used for the purpose of growing vegetation

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

*Waste Avoidance and Resource Recovery Act 2001* (WARR Act) promotes waste reduction and better use of resources in NSW. It includes provisions for waste strategies and programs, and for industry actions to reduce waste. The WARR Act provides for the development of a state-wide Waste Strategies to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of Ecologically Sustainable Development and the Waste Management Hierarchy (outlined in Section 2.1).

---

## 2.1 GUIDANCE MATERIAL

The following guidance material, prepared by EPA and the Department of Environment and Planning, has been considered in the development of this WMP. GPGA should ensure that wastes are managed in accordance with these guidelines, making consideration of any new or updated guidance over time. Relevant guidance documents include:

- *The Waste Classification Guidelines, Part 1: Classifying Waste, EPA 2014.*
- *Construction and Demolition Waste: A Management Toolkit, EPA 2020.*
- *Hazardous waste storage and processing, Guidance for the Liquid Waste Industry 2017.*
- *Managing Waste Mineral Oil, EPA 2017 (online).*

- Guidance on Virgin Excavated Natural Material, EPA 2021 (online).
  - Handling liquid waste fact sheet, Department of Environment and Conservation (NSW) 2005.
  - Storing liquid waste fact sheet Department of Environment and Conservation (NSW) 2005.
- 

## 2.2 WASTE MANAGEMENT HIERARCHY

The Waste Management Hierarchy is a set of priorities for the efficient use of resources and disposal of waste. It includes several disposal options ordered from most desirable (avoidance and reduction of waste) to least desirable (disposal) as presented in Figure 2.1. The management and disposal controls outlined in this report, and the proposed waste treatment and disposal pathways, have been designed to align with the Waste Management Hierarchy with the intent of maximising material reuse and minimising landfill disposal.

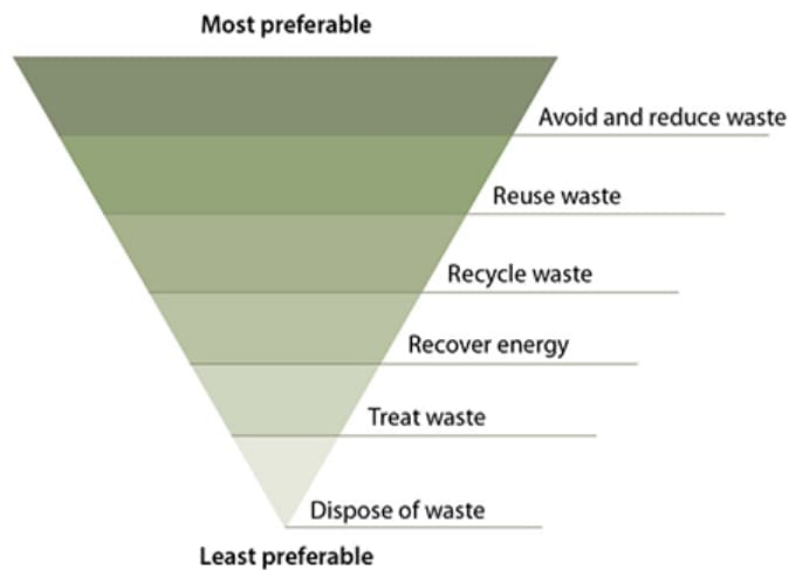


Figure 2.1 Waste management hierarchy, obtained from EPA Website



### 3 PROJECTED WASTE STREAMS

The table below contains details regarding the anticipated waste streams to be produced during the construction and operation of the site. Waste volumes have been estimated for each phase of the Project; however, it is noted that collection frequencies may need to be re-assessed during operation ensure that suitable collection capacity has been provided.

Table 3.1 Projected Waste Streams

| WASTE TYPE        | DESCRIPTION                                                                                                           | PHASE           | SOURCE                                                                                                                              | ESTIMATED VOLUME                    | PROPOSED MANAGEMENT AND DISPOSAL                                                                             |
|-------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------|
| General Wastes    | Plastics, rubber, food waste, miscellaneous wastes. These materials are non-hazardous but may be potentially odorous. | Construction    | General wastes produced during the construction phase, primarily generated by on-site staff (food wastes, packaging wastes etc.)    | <50 tonnes                          | Dedicated General Waste bin.<br><br>Disposed to landfill via a private waste contractor.                     |
|                   |                                                                                                                       | Operation       | Produced during operation of the site from site offices/general site activities.                                                    | 1,200 L skip bin collected monthly. |                                                                                                              |
|                   |                                                                                                                       | Decommissioning | General wastes produced during the decommissioning phase, primarily generated by on-site staff (food wastes, packaging wastes etc.) | <400 tonnes                         |                                                                                                              |
| Recyclable Wastes | Recyclable plastics, paper, cardboard, glass. Excluding scrap metal.                                                  | Construction    | Primarily generated from onsite staff and packaging waste.                                                                          | <20 tonnes                          | Source separated and dedicated Recycling bins.<br><br>Collected for recycling by a private waste contractor. |
|                   |                                                                                                                       | Operation       | Produced during operation of the site from site offices/general site activities.                                                    | 660 L skip bin collected monthly.   |                                                                                                              |
|                   |                                                                                                                       | Decommissioning | Primarily generated from onsite staff and packaging waste.                                                                          | <200 tonnes                         |                                                                                                              |
| Scrap metal       | Steel, copper, aluminium.                                                                                             | Construction    | Waste metals from construction, metal offcuts, excess materials.                                                                    | <20 tonnes.                         | Dedicated metal waste skip bin.                                                                              |

| WASTE TYPE    | DESCRIPTION                                   | PHASE           | SOURCE                                                                                                             | ESTIMATED VOLUME                                                                                | PROPOSED MANAGEMENT AND DISPOSAL                                                                                                                                                                          |
|---------------|-----------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               |                                               | Operation       | Waste steel from maintenance of plant, buildings etc.                                                              | <1 tonne per month, collected as required.                                                      | Collected by metal recycling contractors.                                                                                                                                                                 |
|               |                                               | Decommissioning | Waste metals from decommissioning, offcuts, excess materials, disused materials.                                   | Variable – See <i>Decommissioning and Rehab Plan</i> .                                          | Dedicated metal waste skip bin.<br>Collected by metal recycling contractors as described in the <i>Decommissioning and Rehab Plan</i> .                                                                   |
| Fill material | Clean fill, soils, sands and waste rock.      | Construction    | Excess fill material from excavation and levelling of land for construction of buildings, plant and infrastructure | None                                                                                            | All fill will be retained on site, re-used for minor fill works locally.                                                                                                                                  |
|               |                                               | Decommissioning | Excess fill material from excavation and levelling of land for construction of buildings, plant and infrastructure | None                                                                                            |                                                                                                                                                                                                           |
| Green waste   | Shrubbery, trees and other plants un-mulched. | Construction    | Vegetation removed during land clearing for construction footprint.                                                | ~16,000 m <sup>3</sup><br>Assuming 500 m <sup>3</sup> per hectare removed vegetation (31.8 ha). | Temporary segregated green waste stockpile separated from combustible wastes and vegetation.<br>Reused on site for mulching.<br>Remainder collected by private waste contractor for green waste mulching. |
|               |                                               | Operation       | Maintenance of planted vegetation (trimming etc.)                                                                  | Variable – As needed through maintenance.                                                       |                                                                                                                                                                                                           |

| WASTE TYPE         | DESCRIPTION                                                       | PHASE           | SOURCE                                                                                                             | ESTIMATED VOLUME   | PROPOSED MANAGEMENT AND DISPOSAL                                                                                                                                                                                              |
|--------------------|-------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                                                   | Decommissioning | Minor volumes of green waste from rehabilitation works.                                                            | <50 m <sup>3</sup> | Mulched on site for use in rehabilitation activities.<br><br>Volumes that exceed onsite reuse needs collected by private waste contractor for green waste mulching.                                                           |
| C&D wastes         | Brick, concrete, timber, asphalt materials excess to construction | Construction    | Waste produced from the construction of infrastructure, buildings and facilities.                                  | <5 tonnes          | C&D wastes to be temporarily stockpiled prior to being removed by waste contractors for offsite reuse and/or recycling.                                                                                                       |
|                    |                                                                   | Decommissioning | Waste produced from the decommissioning of infrastructure, buildings and facilities.                               | <1000 tonnes       | Managed in accordance with the Decommissioning and Rehab Plan<br><br>C&D wastes generated during decommissioning to be temporarily stockpiled prior to being removed by waste contractors for offsite reuse and/or recycling. |
| Oils/ hydrocarbons | Liquid oil, lubricants, hydrocarbons and transformer oils         | Construction    | Expired, excess, or waste oils, lubricants and other hydrocarbons from site establishment and ongoing maintenance. | <1000 L            | Stored in bunded oil container pending transport to <b>licensed</b> regulated waste facility by appropriately <b>licensed</b> contractor                                                                                      |
|                    |                                                                   | Operation       |                                                                                                                    | <200 L per month   |                                                                                                                                                                                                                               |
|                    |                                                                   | Decommissioning | Waste oils extracted from WTGs during decommissioning.                                                             | <2000 L            |                                                                                                                                                                                                                               |
| Oily Rags          |                                                                   | Construction    |                                                                                                                    | 1 × 200L bin       |                                                                                                                                                                                                                               |

| WASTE TYPE              | DESCRIPTION                                                | PHASE           | SOURCE                                                                              | ESTIMATED VOLUME                         | PROPOSED MANAGEMENT AND DISPOSAL                                                                                                  |
|-------------------------|------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
|                         | Solid waste containing oil contamination, flammable waste. | Operation       | Plant, vehicle and equipment maintenance and handling.                              | 1 × 200 L bin 6-monthly                  | Dedicated, labelled segregated Oily Rag bin.                                                                                      |
|                         |                                                            | Decommissioning |                                                                                     | 1 × 200 L bin                            | Transport to <b>licenced</b> regulated waste facility by appropriately <b>licenced</b> contractor                                 |
| Oil/Chemical containers | Solid containers with potential residual liquids.          | Construction    | Empty chemical containers (lubricants, oils, chemicals)                             | Variable, <100 kg                        | Reused on site where possible.                                                                                                    |
|                         |                                                            | Operation       |                                                                                     | <10 kg per month                         | Collected for recycling by a private waste contractor or container collection scheme such as <i>drummuster</i> .                  |
|                         |                                                            | Decommissioning | Remaining chemical containers on site.                                              | Variable, <200 kg                        |                                                                                                                                   |
| Sewerage                | Sewerage from onsite staff and contractors.                | Construction    | Portable toilets servicing construction crew (peak of 400 construction crew).       | Variable. Peak volume of 8000L per week. | Collected by portable toilet contractors as part of hire agreement. Disposed to the sewerage system via commercial bulk disposal. |
|                         |                                                            | Operation       | Transfer station permanent toilet                                                   | NA                                       | Permanent constructed septic tank to treat sewerage and release effluent.                                                         |
|                         |                                                            | Decommissioning | Portable toilets servicing decommissioning crew (peak of 400 decommissioning crew). | Variable. Peak volume of 8000L per week. | Collected by portable toilet contractors as part of hire agreement. Disposed to the sewerage system via commercial bulk disposal. |

# 4 WASTE MANAGEMENT CONTROLS

This section details the mitigation and management measures that will be employed during the construction, operation, and decommissioning phases of the Project. The waste management measures have been designed to meet the environmental objectives outlined in the *POEO Act* by managing waste in a way that minimises environmental impacts and protects environmental values. Waste minimisation controls are designed to meet the objectives of the *WARR Act* through the implementation of the waste management hierarchy.

## 4.1 GENERAL WASTE AND RECYCLABLES MANAGEMENT MEASURES

The following general waste management measures will be applied during all phases of the Project:

- Waste management locations will be kept tidy and well maintained. Staff will collect, or report, any litter generated on site, or any untidy waste storage area.
- Clearly label each bin, receptacle, and storage area to ensure wastes are appropriately source separated, stored and consolidated in their designated areas.
- Staff will be briefed on waste management procedures as part of site induction processes and will be actively encouraged to undertake source separation of wastes to support re-use or recycling of materials.
- Any unknown or suspected contaminated or hazardous materials will be quarantined and investigated. This material will be handled and disposed of in accordance with its relevant waste categorisation, and legislative requirements for that category of waste (e.g., apply EPA Waste Tracking requirements) where relevant.

## 4.2 SPECIFIC WASTE MANAGEMENT MEASURES

Table 4.1 contains waste management controls and waste minimisation controls, which are specific to the waste types generated through various phases of the Project, as identified in Section 3. The controls outlined in this section will be applied during all phases of the Project.

Table 4.1 Waste control measures

| WASTE TYPE                                                                        | WASTE MANAGEMENT CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                | WASTE MINIMISATION CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Wastes (light non-recoverable plastics, rubber, food waste, misc. wastes) | <ul style="list-style-type: none"> <li>— Bins will be regularly collected by the project waste contractor:               <ul style="list-style-type: none"> <li>a At least monthly during operation phase; or</li> <li>b When bins reach 80% capacity during construction and rehabilitation phases.</li> </ul> </li> <li>— Lidded front-lift bins or hook-lift skip bins will be provided for General Wastes to minimise odour and pest attraction (e.g. from food wastes).</li> </ul> | <ul style="list-style-type: none"> <li>— Minimise the use of packaging in the mobilisation of plant and materials to the construction zones.</li> <li>— Where possible, source materials from suppliers who participate in the Australian Packaging Covenant.</li> <li>— Prioritise products and suppliers that utilise recyclable wastes over non-recyclable wastes.</li> <li>— Quarterly bin inspections to be undertaken during operation phase to identify miscategorised wastes, reduce contamination and maximise recyclability.</li> </ul> |

| WASTE TYPE        | WASTE MANAGEMENT CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | WASTE MINIMISATION CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclable Wastes | <ul style="list-style-type: none"> <li>— Source segregated bins will be provided to separate non-recyclables from recyclables (i.e., cardboard boxes; glass; plastic and metal containers).</li> <li>— Bins will be regularly collected by the project waste contractor;               <ul style="list-style-type: none"> <li>c At least monthly during operation phase; or,</li> <li>d When bins reach 80% capacity during construction and rehabilitation phases.</li> </ul> </li> <li>— Bins containing lightweight materials (plastics, paper cardboard etc.) should be placed in a lidded bin, and contained within a windshield/building walls to prevent spreading of litter.</li> </ul> | <ul style="list-style-type: none"> <li>— Signage will be displayed near recycling bins to guide staff on appropriate disposal.</li> <li>— Quarterly bin inspections to be undertaken during operation phase to identify miscategorised wastes, reduce contamination and maximise recyclability.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| C&D Wastes        | <ul style="list-style-type: none"> <li>— Separate stockpiles of waste timber and concrete will be created to avoid contamination and assist in its re-use or recycling.</li> <li>— Re-usable timber will be stored separately to waste timber.</li> <li>— Ensure all contractors are inducted and aware of waste minimisation requirements and bin/stockpile locations.</li> </ul>                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>— Where quality can be maintained, preference should be given to sourcing building products that have reduced packaging, or utilise recycled material content (e.g. fly ash in concrete) or higher recycling content.</li> <li>— Waste wood, bricks and crushed rock will be re-used on-site during construction to the extent practicable.</li> <li>— Waste wood, brick, crushed rock and concrete will be assessed for suitability as recycled aggregate materials. Only material which is unsuitable for recycling will be landfilled.</li> <li>— Source segregation of materials that can be reused, or recycled, to prevent contamination, readily enable their recovery, and prevent them from being transported to landfill.</li> <li>— Encourage contractors to undertake pre-work material calculations to minimise wastage.</li> </ul> |
| Metals            | <ul style="list-style-type: none"> <li>— A scrap metal skip will be provided on site for disposal of scrap and waste metals.</li> <li>— Scrap metal will not be stockpiled, discarded or stored outside of the scrap metal skip bin.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <ul style="list-style-type: none"> <li>— All scrap metal collected on site will be sent to a scrap metal waste contractor to be recycled.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| WASTE TYPE                    | WASTE MANAGEMENT CONTROL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | WASTE MINIMISATION CONTROL                                                                                                                                                                                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Oils/<br>Hydrocarbons         | <ul style="list-style-type: none"> <li>— An inventory of MSDSs for hazards substances will be maintained.</li> <li>— Spill kits will be available close to areas where oils, hydrocarbons and chemicals are being used or kept, or wastes of these products temporarily stored pending off-site management.</li> <li>— All oils, hydrocarbons and associated products (e.g. oil filters) must be stored within a roofed, bunded area.</li> <li>— Waste oils will be collected in 200 litre metal drums held within a bunded area pending collection.</li> <li>— The bunded area must be large enough to contain at least 100% of the largest container volume and at least 25% of the total storage volume.</li> <li>— Waste oil containers will be collected by a licenced waste oil contractor when reaching 80% total capacity.</li> <li>— The minimum viable quantity of oils/hydrocarbons will be kept on site.</li> <li>— Empty drums and containers will be stored in a sealed, bunded area pending collection by suitably licenced contractor.</li> <li>— Don't store liquid waste in drums or containers that are rusted, dented or show signs of deterioration.</li> </ul> | <ul style="list-style-type: none"> <li>— Waste liquid oils and hydrocarbons are to be collected by a licenced waste oil recycler for processing and general reuse.</li> </ul>                                                                                                                           |
| Chemical Containers           | <ul style="list-style-type: none"> <li>— Empty chemical containers will be stored in a hardstand bunded area until washed, or removed from site.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>— Empty chemical containers and drums will be washed and reused on site where possible.</li> <li>— Empty chemical containers and drums will be collected for recycling by a private waste contractor or collection program such as <i>drummuster</i>.</li> </ul> |
| Fill Material<br>(Clean fill) | <ul style="list-style-type: none"> <li>— If fill material is suspected of being contaminated (e.g. staining, visual contamination, odour etc.) testing and classification must be undertaken in accordance with <i>The Waste Classification Guidelines 2014</i> prior to disposal of waste.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>— Clean fill material sourced from construction (e.g., excavations) will be retained on-site for reuse in construction and decommissioning phases of the Project.</li> </ul>                                                                                     |

| WASTE TYPE  | WASTE MANAGEMENT CONTROL                                                                                                                                                                                                                                                 | WASTE MINIMISATION CONTROL                                                                                                                                                                                                                                                    |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Green Waste | <ul style="list-style-type: none"> <li>— Green waste must not be burned on site.</li> <li>— Green waste stockpiles should be maintained at the smallest practicable footprint, and separation from other potentially combustible wastes should be maintained.</li> </ul> | <ul style="list-style-type: none"> <li>— To the extent practicable, green waste will be reused on-site for rehabilitation.</li> <li>— Where green waste cannot be reused onsite, it should be collected by a waste management contractor to be mulched and reused.</li> </ul> |
| Sewerage    | <ul style="list-style-type: none"> <li>— Sewerage must be contained within appropriate storage containers (such as portable toilet tanks) at all times.</li> <li>— Sewerage must be handled and transported by sewerage contractors.</li> </ul>                          | N/A                                                                                                                                                                                                                                                                           |

## 4.3 TRANSPORT CONTROLS

When transporting waste, the following minimum transport standards are to be applied to all transported wastes:

- Loose wastes (general waste, recyclable wastes etc.) are to be covered or enclosed during transport to prevent litter, spilling and loss of load.
- C&D wastes and scrap metals are to be contained within a heavy-duty metal skip bin, or similar containment of suitable durability. These are to be covered with tarpaulins (or similar), or enclosed during transport.
- All liquid waste containers (drums, IBCs etc.) are to be sealed and restrained in an upright position when transported by an appropriately permitted vehicle (where relevant).
- GPGA should engage waste transport contractors to undertake waste transport from the site to the relevant disposal location.
- Section 143 of the *POEO Act* requires waste to be transported to a place that can lawfully accept it. GPGA must assess the ability of a site to lawfully accept waste before it disposes waste to that location.

The transport of Controlled or Trackable Wastes (e.g., waste mineral oils, waste oil, waste hydrocarbons etc.), must be undertaken in accordance with the *POEO Act* and *Waste Regulations*. A waste producer may use an authorised agent to manage and track the transport of waste on its behalf. The authorised agent must be approved by the EPA and have a written agreement with the waste producer.

Waste tracking involves the following steps:

- 1 **Characterise** the waste to determine its waste code and waste description. Record the following:
  - a Waste form (Solid, liquid, sludge gas etc.)
  - b Waste Classification (Refer to *The Waste Classification Guidelines, Part 1: Classifying Waste, EPA 2014.*)
  - c Waste Code and Description in accordance with Table 1 of the EPA Waste Tracking Guidance Website. Common waste codes may include:

|                                                           |      |
|-----------------------------------------------------------|------|
| Waste mineral oils unfit for their original intended use  | J100 |
| Waste oil/water, hydrocarbons/water mixtures or emulsions | J120 |

- d Categorise against the Australian Dangerous Goods Code and the United Nations Manual of Tests and Criteria provided in Table 3 of the EPA Waste Tracking Guidance Website.



|   |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | H3 | <b>Flammable liquids:</b> The word 'flammable' has the same meaning as 'inflammable'. Flammable liquids are liquids, or mixtures of liquids, or liquids containing solids in solution or suspension (for example, paints, varnishes, lacquers) but not including substances or wastes, which give off flammable vapour at temperatures of 60.5 degrees Celsius or less using the closed-cup test, or of 65.6 degree Celsius or less using the open-cup test. |
|---|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- 2 Determine if the waste is a **Trackable Waste**. Any waste listed in Table 1 of the EPA Waste Tracking Guidance Website must be tracked. Waste listed in Table 2 must be tracked when transported interstate.
- 3 Apply for access to the EPA's online **Waste Tracking System** (Recommended).
- 4 Obtain a **consignment authorisation (CA)**. A CA is the approval given by a receiving facility or NSW EPA to a waste consignor to transport a specific type of waste for up to one year. Contact the relevant receiving facility to generate a CA.
- 5 Create a **Transport Certificate (TC)**. TCs may be generated online by the consigner, transporter or receiver provided they have user account access to the EPA online waste tracking system.
- 6 **Complete the TC**. It must be printed and accompany the waste load during transport. Information to be recorded includes:
  - a The date the waste was collected.
  - b Intended delivery date.
  - c Date received by receiving facility.
  - d Date of waste disposal, treating or temporary storage.
  - e Any Discrepancies such as waste being wrongly characterised.
- 7 Report any waste tracking **discrepancies** to the EPA using the online waste tracking system.

---

## 4.4 MONITORING, REVIEW, AND CONTINUOUS IMPROVEMENT

The following monitoring and reporting requirements will be applied during all phases of the Project to ensure waste management associated with the Project achieves the environmental objectives and performance outcomes outlined in Section 1.3.

- Records of waste generation and management fate will be kept via retention of waste receipts from contractors and maintained for a period of at least five years.
- Waste collection areas and containers (bins, waste oil storage areas, stockpile, and laydown areas) will be inspected by GPGA, or its representative, on a six-monthly basis to:
  - a Ensure waste is being managed and stored in accordance with Sections 4.1 and 4.2.
  - b To ensure the bins, skips or laydown areas can adequately meet current and expected capacity.
  - c To identify sources of potential litter, odour, or other amenity impacts.
- For general and recyclable wastes, monthly bin inspections to be undertaken during the operations phase to identify miscategorised wastes, reduce contamination, and maximise recyclability.

- In the event of release of waste into the environment, an *Environmental Incident Report* and *Corrective Action Report* will also be completed by GPGA within 24-hours of the incident occurring. GPGA should consider whether it informs EPA on the incident.

This WMP is based on estimations of the wastes that may be generated during Project operations. Where the Project generates a waste type that is not classified and identified in this WMP, it is recommended that this WMP be reviewed and contemporised.

Revision of the WMP is required where:

- Changes in project operations occur, including changes to waste generation, containment, classification, and disposal;
- Improvements to controls documented in the WMP are realised;
- Any other appropriate updates as required; and/or,
- The EPA requires it through a statutory Notice.

---

## 4.5 RECORD KEEPING

GPGA is to generate and retain the following records:

- Waste Records generated for the transport and disposal of Reportable Priority Wastes.
- Receipts and delivery dockets for all wastes collected by waste management contractors and treatment facilities (Camperdown Compost).
- Records of the weekly site environmental inspection.
- Records of any spills, environmental incidents, rejection of waste or complaints.

## 5 REFERENCES

- *Protection of the Environment Operations Act 1997*
- *Protection of the Environment Operations Regulations 2014*
- *Waste Avoidance and Resource Recovery Act 2001*
- *The Waste Classification Guidelines, Part 1: Classifying Waste, EPA 2014.*
- *Construction and Demolition Waste: A Management Toolkit, EPA 2020.*
- *Hazardous waste storage and processing, Guidance for the Liquid Waste Industry 2017.*
- *Managing Waste Mineral Oil, EPA 2017 (online).*
- *Guidance on Virgin Excavated Natural Material, EPA 2021 (online).*
- *Handling liquid waste fact sheet, Department of Environment and Conservation (NSW) 2005.*
- *Storing liquid waste fact sheet Department of Environment and Conservation (NSW) 2005.*

## 6 LIMITATIONS OF THE REPORT

This report is a product of work undertaken by WSP for Global Power Generation Australia (the Client) as part of providing technical advisory services for Paling Yards. This report cannot be relied upon in any circumstance by any party without the approval and execution of WSP's reliance letter.

To the best of WSP's knowledge, WSP's variation (PM\_Variation Request\_V002\_April 2022.pdf) dated 28 April 2022 and the facts and matters described in this Report indicate the Client's intentions in relation to the Project at the time of issuing of this Report. However, the passage of time, the manifestation of latent conditions or the impact of future events (including a change in applicable law) may result in changes to the Project. To the fullest extent permitted by law, WSP, its related bodies corporate and its officers, employees and agents assumes no responsibility and will not be liable to any third party (excluding those permitted upon execution of the reliance letter) for any loss, expense or damage (including any indirect, consequential or punitive losses or damages or any amounts for loss of income or profits, of any kind (arising in contract, tort or otherwise) suffered or incurred by a third party arising from any matter dealt with in the report, or conclusions expressed in the report.

The information contained within the documents as referenced throughout this report or received from GPGA, have not been independently verified and checked by WSP. If the material set out in these documents is inaccurate or incomplete, it may impact the conclusions or recommendations made in this Report. WSP takes no responsibility for the accuracy and completeness of this information. WSP is not obliged to update or revise this Report to consider any events or emergent circumstances or facts occurring or becoming apparent after the date of the Report.

This Report is not a certification, warranty or guarantee. It is a report based on the instructions given to WSP set out in the variation (PM\_Variation Request\_V002\_April 2022.pdf) limited by time and budget constraints. These time and budget constraints have meant that WSP's investigations have concentrated on significant and material items and issues. No testing or detailed inspection was undertaken.

This Report may contain various remarks about and observations on legal documents, arrangements and agreements. Generally, a consulting engineer can make remarks and observations about the technical aspects and implications of those documents and make general remarks and observations of a non-legal nature about the contents of those documents. However, as a consulting engineer, WSP is not qualified, cannot express, and should not be taken as in any way expressing any opinion or conclusion about the legal status, validity, enforceability, effect, completeness or effectiveness of those arrangements or documents or whether what is provided for is effectively provided for. These are matters on which legal advice should be obtained.

Unless and except to the extent that WSP expressly indicates otherwise in this report, WSP's comments, conclusions and recommendations are provided strictly on the basis that the facts, findings and assumptions contained in the information provided or made available to WSP (whether in writing, electronically, on-line, verbally or otherwise) and referenced throughout this report are reliable, accurate, complete and adequate.

Any opinion expressed by WSP concerning predictions of cost are based on WSP's judgement and understanding of the commercial and contractual setting of the Project as is referenced in the report. WSP has no control over the cost of labour, materials, equipment or services to be furnished by others, or over third party contractors' methods of determining prices, competitive bidding or market conditions. WSP does not warrant or guarantee the accuracy of any opinion expressed concerning predictions of cost of equipment and construction costs.