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AUTHOR	Shaun Smith
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Appendix P – Waste Minimisation and Management Plan



WASTE MINIMISATION AND MANAGEMENT PLAN

PROPOSED RAZORBACK QUARRY

39 Razorback Road Running Stream, NSW

Plantation Pine Products Australia Pty Ltd

8 December 2022



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1	07/12/2022	Shaun Smith – Principal Environmental Planner	Mark Daniels (Development and Planning Manager)	Draft for review
2	08/12/2022	Shaun Smith – Principal Environmental Planner	Mark Daniels (Development and Planning Manager)	Final for issue

1. Introduction

This Waste Minimisation and Management Plan (WMMP) has been prepared to accompany a Development Application to Mid-Western Regional Council (MWRC) for the construction and operation of a 200,000tpa sand and gravel quarry, and associated infrastructure, at 39 Razorback Road, Running Stream NSW (referred to as Lot 2 DP569979).

Key components of the development will include:

- Up to 200,000tpa of extraction over a 30 year period,
- Operations to occur Monday to Friday and Saturday mornings only,
- Construction of an internal haul road, sediment control dams, site office, weighbridge, and workshop,
- Construction of noise/visual bunds,
- Installation of site drainage to separate clean and dirty water area,
- Extraction by excavator and transport by highway trucks,
- Onsite material screening and stockpiling, and
- Progressive rehabilitation.

2. Purpose

This WMMP has been prepared to satisfy the requirements of *Chapter 5.4 – Pollution and Waste Management* of the MWRC DCP 2013. The following is required to be addressed as part of the WMMP:

“Proponents should indicate all waste streams i.e. trade, liquid, chemical, solid, medical, and clarify how they will be managed and contained safely on-site and disposed of such that there are no environmental impacts or effects on adjoining properties, stormwater or sewerage systems or waterways”.

3. Objectives

The objectives of this WMMP are:

- Minimisation of waste generation,
- Maximisation of recycling and reuse of waste materials,
- Appropriate handling and storage of waste materials whilst present on the site during construction activities,
- Disposal of wastes to appropriately licenced facilities,
- Minimise the environmental impacts associated with waste management, and
- Meet regulatory requirements for waste recycling and disposal.

4. Legislative and Statutory Framework

4.1 Legislation

Legislation relevant to this WMMP includes:

- Environmental Planning and Assessment Act 1979 (EP&A Act),
- Protection of the Environment Operations Act 1997 (POEO Act),
- Protection of the Environment Operations (General) Regulation 2009,
- Protection of the Environment Operations (Waste) Regulation 2014,
- Waste Avoidance and Resource Recovery Act 2001 (WARR Act), and
- Contaminated Land Management Act 2021,
- National Greenhouse and Energy Reporting Act 2007 (Cth),
- Biosecurity Act 2015, and
- Environmentally Hazardous Chemicals Act 1985.

4.2 Guidelines and Standards

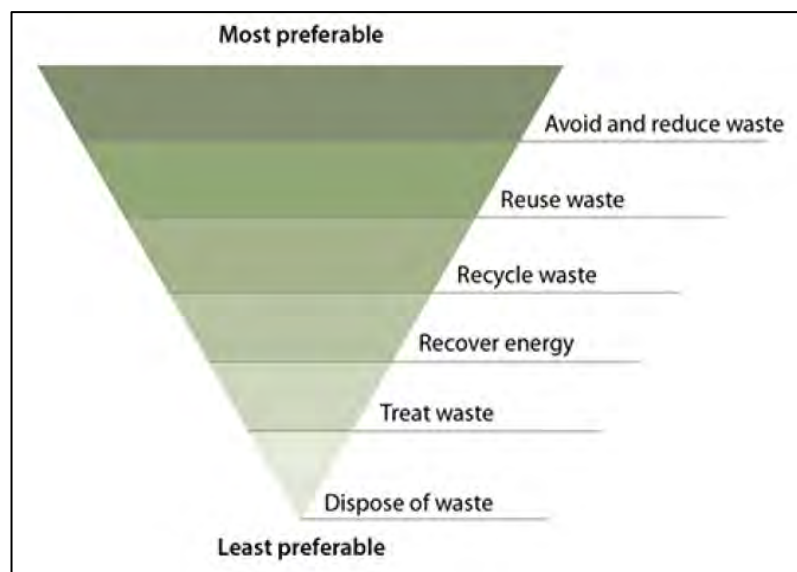
The main guidelines, specifications, and policy documents relevant to this WMMP include:

- Waste Classification Guidelines Part 1: Classifying waste (NSW EPA, 2014),
- Waste Classification Guidelines Part 2: Immobilisation of waste (NSW EPA, 2014),
- Waste Reduction and Purchasing Policy 2011-2014 (WRAPP), NSW Government,
- Guidelines on Resource Recovery Exemptions - Land Application of Waste Materials as Fill (2011, DECCW),
- Storing and Handling Liquids, Environmental Protection: Participants Manual (NSW DECC, 2007),
- National Environment Protection (Assessment of Site Contamination) Measure 1999 (National Environment Protection Council, April 2013), and
- Waste Levy Guidelines (NSW EPA, 2018).

5. Waste Management

5.1 Waste Hierarchy

The waste hierarchy is a set of priorities for the efficient use of resources; this underpins the objectives of the *Waste Avoidance and Resource Recovery Act 2001*.



- **Avoid:** Waste avoidance by reducing the quantity of waste being generated. This is the simplest and most cost-effective way to minimise waste. It is the most preferred option in the waste management hierarchy.
- **Re-use:** Reuse occurs when a product is used again for the same or similar use with no reprocessing. Reusing a product more than once in its original form reduces the waste generated and the energy consumed, which would have been required to recycle.
- **Recycle:** Recycling involves processing waste into a similar non-waste product consuming less energy than production from raw materials. Recycling spares the environment from further degradation, saves landfill space and saves resources.
- **Dispose:** Removing waste from worksites and dumping on a licensed landfill site, or other appropriately licensed facility.

5.2 Waste Streams

Any wastes generated are to be classified in accordance with the NSW EPA Waste Classification Guidelines (2014), which classifies wastes into the following streams:

- Special waste (e.g. clinical and related waste, asbestos, waste tyres),
- Liquid waste (e.g. fuels, oils, chemicals and pesticides),
- Hazardous waste (e.g. lead-acid batteries and lead paint),
- Restricted solid waste (currently no wastes pre-classified as restricted by EPA),
- General solid waste (putrescible) (e.g. general litter and food waste), and
- General solid waste (non-putrescible) (e.g. glass, paper, plastic, building demolition waste, concrete).

Waste generating activities, the types of wastes generated, proposed disposal methods, and quantities are provided in **Appendix A**.

5.3 Waste Classification

Waste that cannot be avoided, re-used, or recycled will be classified in accordance with the *Waste Classification Guidelines* (EPA, 2014) and disposed of at appropriately licenced facilities. The guidelines detail how to assess and classify waste and management options for disposal of the classified waste. A summary of the waste classification steps is included below:

- Establish if the waste should be classified as special waste,
- If not special waste, establish whether the waste should be classified as liquid waste,
- If not special waste or liquid waste, establish whether the waste is of a type that has already been classified. Note, the EPA has 'pre-classified' a number of commonly generated wastes,
- If the waste is not special waste, liquid waste, or pre-classified waste, establish if it has certain hazardous characteristics and can therefore be classified as hazardous waste,
- If the waste does not possess hazardous characteristics, it needs to be chemically assessed to determine what class of waste it is. If the waste is not chemically assessed, it should be treated as hazardous waste, and
- If the waste is chemically assessed as general solid waste, a further test is available to determine whether the waste is putrescible or non-putrescible. This test determines whether the waste is capable of significant biological transformation. If the waste is not tested, it should be managed as general solid waste (putrescibles).

6. Environmental Management Controls

Mitigation and management measures associated with waste handling on the site are outlined below and have been developed to ensure consistency with industry best practice:

- Ensure that all waste (liquid, air emissions and solid material) generated during site clearing and subdivision project construction are managed in accordance with waste hierarchy (avoid, reuse, recycle, dispose) to reduce adverse impact on the environment,
- Manage and reduce consumption and use of natural resources and promote the use of alternative environmentally friendly materials where practical,
- Licensed waste contractors will be used to collect, transport, and dispose of materials at a licensed off-site facility in accordance with waste regulations,
- Waste will be appropriately contained in designated waste areas located away from drainage paths,
- No burning of waste or vegetation is allowed under any circumstances,
- General and putrescible waste and recyclables such as metal, plastic, glass, paper, cardboard will be segregated and collected in suitable waste containers positioned in convenient locations within each work area,
- Concrete, steel, timber, green waste, and plasterboard will be stored in separate skip bins,
- Soil will be stored in stockpiles away from drainage lines and drip lines of trees with appropriate run-off controls,
- All waste skip bins will have secure lids in place to prevent water ingress and access for animals,
- Quantities of waste kept on-site will be kept to a minimum. Maximum volume of each waste stored will be consistent with regulations and guidelines,
- Volume of materials required for future home construction will be calculated carefully to avoid over ordering of materials,
- Portable toilets will be used on site during home construction sewage waste will be collected as required and disposed of at a licensed off-site facility,
- Excavated soil is anticipated to be re-used on-site. Where soil can't be re-used it will be classified in accordance with waste classification guidelines,

- Waste concrete, timber, steel, cardboard, paper, recyclable plastics, etc removed from site will be recycled at recycling facilities, and
- Any Asbestos Containing Materials (ACM) discovered will be disposed off-site at a licenced facility in accordance with waste classification guidelines and hazardous waste guidelines.

7. Training

All employees, contractors and staff working on site will undergo site induction training (which includes environmental due diligence training) and environmental training in relation to waste management issues. The induction will address:

- This document,
- Relevant legislation,
- Waste minimisation strategies,
- Waste recognition and recycling,
- Available recycling facilities, and
- Energy and water minimisation measures.

Records would be kept of all personnel undertaking the site induction and training, including the contents of the training, date, and name of trainer/s.

Key staff will undertake more comprehensive training relevant to their position and/or responsibility. This training may be provided as “toolbox” training or specific training tailored by the Site Supervisor.

8. Monitoring and Review

8.1 Monitoring and Inspections

Daily visual inspections of the site will be undertaken during construction to identify actual or potential waste management issues. Any issues will be reported to the Site Supervisor for rectification.

8.2 Waste Register

A waste register will be maintained by the Site Supervisor to record waste disposal during construction activities. All dockets and receipts will be retained for waste tracking to record the date of waste removal and identify the waste transport contractor and destination of the wastes.

8.3 Waste Tracking

The following wastes are subject to special monitoring and reporting requirements by the EPA under the waste tracking system:

- Hazardous non-liquid waste (e.g. asbestos),
- Industrial non-liquid waste, and
- Liquid wastes including non-recyclable oils, fuels, chemicals, and paint.

It is the Site Supervisors obligation under the NSW Protection of the Environment Operations (Waste) Regulation 2005 to identify and complete tracking information for all trackable wastes. A waste tracking register is provided as **Appendix B**.

9. Responsibilities

It is the responsibility of the Site Supervisor to ensure that wastes on site are appropriately segregated, sorted, and disposed of in an environmentally sustainable and lawful manner. It is the responsibility of all workers and contractors on the development site to ensure that specific waste streams are stored in the designated containments areas for later collection by a licenced waste contractor.



APPENDIX A - WASTE MANAGEMENT PLAN

Construction Phase

TYPE OF WASTE GENERATED	REUSE	RECYCLING	DISPOSAL	METHOD OF RE-USE OR DISPOSAL
	Estimated Volume (m ³) or Weight (t)	Estimated Volume (m ³) or Weight (t)	Estimated Volume (m ³) or Weight (t)	
Excavated Material (overburden)	8,500m³	NIL	NIL	Reuse on site for road and bund construction
Timber	NIL	3m³	NIL	To licenced recycling facility
Concrete	NIL	2m³	NIL	To licenced recycling facility
Bricks	NIL	NIL	NIL	N/A
Tiles	NIL	NIL	NIL	N/A
Metal	NIL	10m³	NIL	To licenced recycling facility
Glass	NIL	NIL	NIL	N/A
Plasterboard	NIL	NIL	NIL	N/A
Fixtures and fittings	NIL	NIL	NIL	N/A
Floor coverings	NIL	NIL	NIL	N/A
Packaging (used pallets, pallet wrap)	NIL	10m³	NIL	To licenced recycling facility
Greenwaste organics	10m³	NIL	NIL	Re-use onsite as mulch and for soil stabilisation
Containers (cans, plastic, glass)	NIL	3m³	NIL	To licenced recycling facility
Paper/cardboard	NIL	NIL	NIL	N/A
Residual Waste (general waste)	NIL	NIL	7m³	To licenced landfill
Hazardous/special waste	NIL	NIL	NIL	N/A
Sewerage (portaloo pump-out)	NIL	3m³	NIL	To licenced treatment facility

Operational Phase

TYPE OF WASTE GENERATED	REUSE	RECYCLING	DISPOSAL	METHOD OF RE-USE OR DISPOSAL
	Estimated Volume (m ³) or Weight (t)	Estimated Volume (m ³) or Weight (t)	Estimated Volume (m ³) or Weight (t)	
Excavated Material (overburden)	81,900m ³	NIL	NIL	Reuse on site for road construction and quarry pit back-filling
Timber	NIL	NIL	NIL	N/A
Concrete	NIL	NIL	NIL	N/A
Bricks	NIL	NIL	NIL	N/A
Tiles	NIL	NIL	NIL	N/A
Metal	NIL	NIL	NIL	N/A
Glass	NIL	NIL	NIL	N/A
Plasterboard	NIL	NIL	NIL	N/A
Fixtures and fittings	NIL	NIL	NIL	N/A
Floor coverings	NIL	NIL	NIL	N/A
Packaging (used pallets, pallet wrap)	NIL	NIL	NIL	N/A
Greenwaste organics	NIL	NIL	NIL	N/A
Containers (cans, plastic, glass)	NIL	0.25m ³ *	NIL	To licenced recycling facility
Paper/cardboard	NIL	0.5m ³ *	NIL	To licenced recycling facility
Residual Waste (general waste)	NIL	NIL	1m ³ *	To licenced landfill
Hazardous/special waste	NIL	NIL	NIL	N/A
Sewerage (portaloo pump-out)	NIL	0.25m ³ *	NIL	To licenced treatment facility

* Denotes weekly volume of waste



APPENDIX B - WASTE TRACKING REGISTER

