WASTE MANAGEMENT PLAN

Development Application: Construction of Single-Storey Dwelling and Shed

Site Address:

56 Charbon Road, Charbon NSW 2848

Applicant's Name & Address:

Josip Almasi

Buildings & Other Structures on Site:

Vacant lot

Description of Proposal:

Construction of a new single-storey, 3-bedroom, 1-bathroom dwelling with combined living/dining areas, clad with fibre cement, and a prefabricated shed. Both structures utilize prefabricated frames, and the shed includes a formed-up concrete slab.

Local Government Authority:

Mid-Western Regional Council

Generated by:

Josip Almasi on [14 April 2025]

Section 2: Waste Management Plan

This Waste Management Plan outlines the management of materials generated during the construction of the dwelling and shed at 56 Charbon Road, Charbon NSW 2848. Prefabricated frames and modern techniques minimize waste, aligning with NSW EPA guidelines and Mid-Western Regional Council's waste policies. Waste will be reused, recycled, or disposed of at the Kandos Waste Management Centre, approximately 10 km from the site.

Type of Material	Estimated Quantity (m² or m³)	Reuse and Recycling: On-Site	Reuse and Recycling: Off-Site	Disposal
Excavation Materials	3 m³	Spread on site for leveling and reused under shed slab as fill.	Excess exported to local contractor for reuse in regional projects (e.g., road base).	N/A – Minimal disposal expected due to reuse.
Green Waste	1 m³	Mulched and spread on site for landscaping or erosion control.	N/A – Fully reused on site.	N/A
Fibre Cement (Cladding Offcuts)	0.5 m³	Small offcuts stored for potential use in minor patching or landscaping borders.	Transported to Kandos Waste Management Centre for recycling where facilities allow, or to approved regional recycler for fibre cement.	Minimal disposal at Kandos Waste Management Centre landfill if non-recyclable (EPA-compliant).
Concrete	4 m ³ (shed slab) + 0.5 m ³ (miscellaneous) = 4.5 m ³	Crushed for reuse as sub-base or fill on site where feasible.	Remainder to Kandos Waste Management Centre for concrete recycling.	N/A – Fully recycled.
Timber (Pine, Lightweight)	1 m³	Offcuts used for infills, bracing, or temporary formwork on site.	Remainder to Kandos Waste Management Centre for timber recycling or biomass programs.	N/A – Fully recycled.

Plasterboard	0.5 m³	Small offcuts used for patching or infills during construction.	Sorted and transported to Kandos Waste Management Centre or regional facility (e.g., Boral-accredited recycler) for plasterboard recycling.	N/A – Fully recycled.
Metals (Aluminum, Steel)	0.5 m³	Sorted and stored for reuse in minor fittings or bracing on site.	Transported to Kandos Waste Management Centre for metal recycling.	N/A – Fully recycled.
Packaging (Cardboard, Plastic)	0.8 m³	Compacted and sorted for on-site storage prior to recycling.	Transported to Kandos Waste Management Centre for cardboard and plastic recycling streams.	N/A – Fully recycled.
General Waste (Non-Recycla ble)	0.2 m³	N/A – Minimized through prefabrication.	N/A	Transported to Kandos Waste Management Centre for landfill disposal (EPA-compliant).

Supporting Notes and Estimations

1. Fibre Cement Waste:

- Estimated at 0.5 m³, assuming minimal offcuts from cladding a single-storey, 3-bedroom house (approx. 150-200 m² floor area, with cladding panels pre-cut for efficiency).
- Fibre cement is handled carefully to avoid dust (per SafeWork NSW guidelines).
 Offcuts are prioritized for on-site reuse or transported to Kandos Waste
 Management Centre. If recycling isn't available locally, a regional facility
 approved for fibre cement will be used to avoid landfill disposal.

2. Minimal Waste Generation:

Prefabricated frames for the house and shed reduce waste by using pre-cut components, aligning with ISO 14001 environmental management principles. Fibre cement cladding is installed with precision, further minimizing offcuts compared to traditional materials like bricks.

3. Concrete Slab Estimation:

- Shed Slab: Based on a typical 6m x 4m shed (24 m²) with a 0.15m slab thickness, the concrete volume is 24 m² x 0.15m = 3.6 m³. With 10% wastage (spillage, over-pour), the total is 4 m³.
- **Miscellaneous Concrete:** 0.5 m³ for minor footings or pathways.
- Waste concrete will be crushed on-site for reuse or recycled at Kandos Waste Management Centre, per NSW EPA guidelines.

4. Excavation Materials:

Estimated at 3 m³ for minor leveling and shed slab preparation on a vacant lot. Reused on-site to reduce transport emissions, supporting council sustainability goals.

5. Waste Management Centre:

Kandos Waste Management Centre, operated by Mid-Western Regional Council, accepts recyclables (concrete, metals, timber, plasterboard, cardboard) and general waste. Fibre cement disposal will follow council or regional recycler protocols to ensure compliance.

6. Industry Standards and Compliance:

- **NSW EPA Guidelines:** Prioritizes waste avoidance and recycling, with fibre cement handled per hazardous material protocols if required.
- **AS 2601 (Demolition and Construction):** Ensures safe material sorting and handling.
- SafeWork NSW: Guides safe handling of fibre cement to minimize dust risks.
- **ISO 14001 Principles:** Adopted for efficient material use and recycling.
- **Mid-Western Regional Council DCP:** Aligns with council waste management plan requirements for development applications.

7. Contractor Arrangements:

- Recycling: Kandos Waste Management Centre handles most recyclables. Fibre cement and plasterboard may go to specialized regional recyclers (e.g., Boral for plasterboard) if needed.
- **Disposal:** Minimal general waste (<0.2 m³) to Kandos landfill, EPA-compliant.
- **Transport:** Local contractors minimize carbon footprint, with details finalized during construction.

Commitment to Sustainability

The project achieves an estimated **95% recycling rate** through prefabrication, on-site reuse, and recycling at Kandos Waste Management Centre. Fibre cement waste is managed responsibly to comply with safety and environmental standards. Site inspections will ensure

proper waste sorting and storage, with records for council verification, supporting Mid-Western Regional Council's environmental objectives.

References:

- Mid-Western Regional Council. (2025). Waste Services. Available at: <u>https://www.midwestern.nsw.gov.au/</u>
- NSW Environment Protection Authority (EPA). (2025). *Waste and Resource Recovery Guidelines*.
- Standards Australia. (2001). AS 2601: The Demolition of Structures.
- SafeWork NSW. (2025). Handling Fibre Cement Safely.
- International Organization for Standardization. (2015). *ISO 14001: Environmental Management Systems*.