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## Jindabyne Educational Facility - Construction Waste Management Sub-Plan

This **Construction Waste Management Sub-Plan** (CWMSP) addresses the relevant requirements of the SSD-15788005 Conditions B-18 and C31-35, with regard to the management of waste materials produced as a result of construction works at the development located 207 Barry Way, Jindabyne NSW.

The CWMSP specifically responds to the following clauses:

- B18. The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the procedures for the management of waste including the following:
- (a) the recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use for materials to remain;
- (b) information regarding the recycling and disposal locations; and
- (c) confirmation of the contamination status of the development areas of the site based on the validation results.
- C31. All waste generated during construction must be secured and maintained within designated waste storage areas at all times and must not leave the site onto neighbouring public or private properties.
- C32. All waste generated during construction must be assessed, classified and managed in accordance with the Waste Classification Guidelines Part 1: Classifying Waste (EPA, 2014).
- C33. The Applicant must ensure that concrete waste and rinse water are not disposed of on the site and are prevented from entering any natural or artificial watercourse.
- C34. The Applicant must record the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations for the duration of construction.
- C35. The Applicant must ensure that the removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility is in accordance with the requirements of the relevant legislation, codes, standards and guidelines.

The following sections of the CWMSP address each of these clauses.

# **Materials Quantities**

The following quantities of materials are estimated to result from construction activities:

Materials on Site		Destination/Treatment		
Type of Material	Estimated Volume (m³)	Onsite (Reuse/Recycle)	Offsite (Reuse/Recycle)	Disposal (Landfill)
Excavation Material (Soil, Rock)	8,000	5,000 m³ reused on site	2,500 m <sup>3</sup> reused/recycled off site	500 m³ unsuitable for reused/recycling and sent to landfill
General Waste	45	No on-site reuse or recycling	No off-site reuse or recycling	Disposal to landfill
Excess Concrete	29	Separated on site and crushed for use in temporary road construction	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Excess Timber	20	Reuse for formwork where possible	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Recyclable Packaging & Containers	21	No on-site reuse	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Steel	17	No on-site reuse	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Used Pallets	13	Reused on site for storage where possible	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Plasterboard Offcuts	9	No on-site reuse	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Floor Coverings	8	No on-site reuse	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
Glass	6	No on-site reuse	Collected in mixed skip and taken to nearest suitable recycling facility	No disposal to landfill
TOTALS	8,164 m³	5,300 m <sup>3</sup>	2,624 m³	240 m³

In total, construction activities are expected to produce around **8,164 cubic metres** of waste materials, of which **7,624 cubic metres** or **92%** by volume can potentially be diverted from landfill to reuse or recycling outcomes.

Where possible, prefabricated materials will be used, to minimise waste requiring transportation off-site during the construction process.

#### Reuse, Recycling, & Disposal

The site's waste contractor will provide these services and ensure that there are adequate numbers of clearly marked bins on site to enable effective separation of the materials listed above. Specific locations of disposal facilities on site and removal schedules will be determined prior to commencement of works. All civil and construction works subcontractors will receive suitable training in separation of waste materials, and practices to be followed in the event that contaminated materials are encountered (see below).

Where contaminated fill/soil is not suitable for onsite retention or is surplus to construction requirements, materials will be remediated by off-site disposal. Materials shall be classified in accordance with EPA (2014) *Waste Classification Guidelines* or an appropriate exemption as created under the *Protection of the Environment Operations (Waste) Regulation* 2014.

All waste materials removed from the site will be taken to one or more licensed treatment facilities, depending on material type. As the site is situated in a remote location, the facilities below are the closest available locations likely to be able to process the expected materials types:

Facility	Address	Materials Accepted
ACT Recycling	Mugga Lane Symonston ACT	Virgin excavated natural material (VENM), rock, concrete, metals, plastics, mixed C&D waste
Canberra Concrete Recyclers	Pialligo Avenue ACT	Virgin excavated natural material (VENM), concrete, bricks, tiles, timber, metals, C&D waste
Mugga Lane Resource Management Centre	Mugga Lane Symonston ACT Landfill materials, asbestos	

#### **Excavation & Off-Site Disposal**

Fill materials shall be classified in accordance with *Waste Classification Guidelines Part 1: Classifying Waste*, November 2014 (EPA 2014) or an appropriate exemption as created under the Protection of the Environment Operations (Waste) Regulation 2014.

It is anticipated natural soils/bedrock will require off-site disposal and these shall also be classified in accordance with *Waste Classification Guidelines Part 1: Classifying Waste*, (EPA 2014).

Waste certificates will be prepared for each material type that is to be disposed of. All off-site waste facilities used must be lawfully licensed to receive the materials sent to them for disposal.

The Remediation Contractor must be aware of and conduct all waste disposal in accordance with all relevant regulations. All waste tracking documentation including disposal dockets must be maintained by the Remediation Contractor and must be provided to the Site Contamination (Environmental) Consultant and the client for inclusion in the validation report.

# **Data Collection & Validation**

Validation data is required to be collected to verify the effectiveness of the remedial works and document the final site conditions as being suitable for the proposed future use(s). Validation activities will be required for tracking the movement of waste materials requiring off-site disposal.

#### Hazardous Materials Management (Including Fibrous Materials)

Section 42 of the Protection of the Environment Operations (Waste) Regulation 2014 stipulates special transportation, reporting, re-use and recycling requirements relating to asbestos waste.

The requirements for the transportation of asbestos waste include:

- Bonded asbestos material must be securely packaged at all times
- Friable asbestos material must be kept in a sealed container
- Asbestos-contaminated soils must be wetted down
- All asbestos waste must be transported in a covered, leak-proof vehicle

The transporter of asbestos waste must provide the following information to be given to NSW EPA prior to the transportation of asbestos waste loads:

- Source site details including address, name and contact details
- Date of proposed transportation commencement
- Name, address and contact details of disposal site
- Approximate weight of each class of asbestos in each load

The transporter must give the following information to the disposal site before or at delivery:

- Unique consignment code issued by EPA in relation to that load
- Any other information specified in the Asbestos and Waste Tyres Guidelines

The requirements relating to the off-site disposal of asbestos waste are as follows:

- Asbestos waste in any form must be disposed of only at a landfill site that may lawfully receive the waste
- When asbestos waste is delivered to a landfill site, the occupier of the landfill site must be informed by the person delivering the waste that the waste contains asbestos
- When unloading and disposing of asbestos waste at a landfill site, the waste must be unloaded and disposed of in such a manner as to prevent the generation of dust or the stirring up of dust
- Asbestos waste disposed of at a landfill site must be covered with virgin excavated natural material or other material as approved in the facility's environment protection licence

All wastes generated and proposed to be disposed of off-site shall be assessed, classified and managed in accordance with the NSW EPA *Waste Classification Guidelines* 2014. Where wastes require immobilisation prior to off-site disposal (to reduce waste classifications) an immobilisation approval shall be sought in accordance with Part 2 of the NSW EPA *Waste Classification Guidelines* 2014. Immobilisations are only anticipated to be required with unexpected finds.

### Asbestos Removal Regulations & Codes of Practice

The removal and disposal of asbestos will be managed in accordance with the Work Health and Safety Act 2011 (WHS Act) and WHS Regulation, *How to Safely Remove Asbestos: Code of Practice* (Safe Work NSW 2019a13), *How to Manage and Control Asbestos in the Workplace Code of Practice* (Safe Work NSW 2019b14), the NSW EPA (2014) *Waste Classification Guidelines*, and requirements under the Protection of the Environment Operations (Waste) Regulation (2014) for asbestos waste monitoring.

Excavation, onsite remediation and removal of asbestos impacted soils are required to be conducted by a Class A (during removal of friable asbestos) or a minimum of Class B (during removal of bonded ACM) Asbestos Removal licensed contractor. It will be the requirement of the appointed civil works contractor to obtain the appropriate approvals (as outlined below) and prepare an Asbestos Removal Control Plan (ARCP).

All airborne asbestos fibre monitoring works must be undertaken by a competent person or Licenced Asbestos Assessor, in accordance with SafeWork NSW requirements. Before starting the affected works, a licensed asbestos removal contractor shall be responsible for submitting the appropriate WorkSafe NSW permit (friable or non-friable) to remove asbestos at least five business days prior to the proposed works where required.

Remediation works shall not commence until all required approvals, licences and notifications including waste classification documentation (in accordance with EPA 2014) have been granted.

A licensed asbestos removalist and SafeWork notification regarding the scope of the removal works is required. The appointed Remediation Contractor must obtain a site-specific permit approving the works from SafeWork NSW. A permit will not be granted without a current licence and the application must be made at least seven days before the work is due to commence.

Removal of non-friable ACM (>10 m²) is required to be conducted by a contractor holding at least a Class B licence. Removal for friable asbestos is required to be conducted by a contractor holding a Class A licence.

For details of hazardous materials on site, and recommended management practices, please refer to the *Hazardous Materials Register and Asbestos Management Plan* (Coffey 2013) submitted as part of the EIS for the development's SSDA submission.

# **Applicable Regulations & Guidelines**

The following regulations and guidelines apply with respect to hazardous materials identification, classification, and management and are in line with the Planning Secretary's Environmental Assessment Requirements (SEARs):

- NSW EPA, Sampling Design Guidelines (EPA, 1995)
- Managing Land Contamination: Planning Guidelines SEPP55 Remediation of Land (DUAP, 1998)
- NSW OEH, Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (OEH, 2011)
- National Environment Protection Council (NEPC) National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended in 2013), (NEPC, 2013)
- Protection of the Environment Operations (Waste) Regulation 2014
- NSW EPA Waste Classification Guidelines, Part 1: Classifying Waste (EPA, 2014a)
- NSW EPA Waste Classification Guidelines Part 2: Immobilisation of Waste (EPA, 2014b); and
- NSW EPA (2017) Contaminated Sites Guidelines for the NSW Site Auditor Scheme 3rd Edition (EPA, 2017).
- Safe Work NSW How to Safely Remove Asbestos Code of Practice 2019

## Reference Drawings & Documents

The following drawings and documents were reviewed in the course of preparing this CWMSP:

Document Title		
SSD Instrument of Consent Holder Full Version		
Architectural Design Brief and Room datasheets - rev A		
80820348-CI-RPT-001 - Schematic Design Report Civil		
CI-1001 - Cover Sheet, Locality Plan		
CI-1011- Civil Construction Notes Sheet 1		
CI-1141- CutFill Earthworks Plan		
CI-1651- Site Sections Sheet 1		
CI-1652- Site Sections Sheet 2		
CI-1653- Site Sections Sheet 3		
A0.103-EXISTING SITE PLAN - Rev B		
A0.104-DEMOLITION PLAN - Rev B		
A0.105-PROPOSED SITE PLAN - Rev B		
A1.001-LOWER GROUND PLAN - Rev C		
A1.002-GROUND LEVEL PLAN - Rev C		
A1.003-LEVEL 1 PLAN - Rev C		
Hazardous Materials Register and Asbestos Management Plan (Coffey 2013)		

This CWMSP has been prepared by:

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