

KARARA MINING LIMITED

Wet TSF 2C

Scope of Work for Pre-Feasibility Study

1319-CI-SOW-1005

20 Nov 2025

Synopsis

This document covers the Scope of Work for the Pre-Feasibility Study for the Proposed Wet Tailing Storage Facility (TSF) 2C. The purpose of the PFS is to study multiple options for a new wet TSF within approved mining boundary to achieve a maximized wet TSF capacity for the life of mine of 20 – 25 years. The deliverable of the PFS shall include multiple options. Each option shall include but not limited to the following content: new wet TSF location, layout drawing and embankment profile of new TSFs that shows embankment raises, constructability study including construction material selection, water loss study, construction capital budgetary estimate with +/- 30% accuracy, construction timeframe estimate, other critical factors or constraints that will impact the option such as environmental and regulatory requirements. A comprehensive comparison analysis for each option shall also be provided in the PFS with recommended option to proceed with engineering design for the next stage of the engagement.

The PFS development process will involve interactive discussion sessions with Karara Mining through workshops or other communication channels.

Disclaimer

"This document has been prepared by Karara Mining Limited for their exclusive use ("the Purpose"). Use of this document other than for the Purpose is not permitted."

1319-CI-SOW-1005 – SCOPE OF WORK FOR PRE-FEASIBILITY STUDY

REV	DESCRIPTION	ORIG	REVIEW	APPROVAL	DATE
A	Issued for Quotation	 S Yap	CC Luo	CC Luo	20-Nov -25

CONTENTS

1.	GLOSSARY	1
2.	INTRODUCTION AND BACKGROUND.....	3
3.	SCOPE OF WORK	5
3.1	Introduction	5
3.2	Scope of Services	5
3.3	Pre-Feasibility Study	6
3.3.1	Study Objectives	6
3.3.2	Design Options.....	6
3.4	Tailings Storage Lifts	9
3.5	Better Utilization of Available Materials on Site	9
3.6	Construction Cost Estimate	10
4.	PROPOSED MILESTONES DATES	11
5.	COST PROPOSAL BASIS	12
6.	REPORTS, PROCEDURES AND STANDARDS	13
6.1	Applicable Documents	13
6.2	Past Reports and Studies	13
6.3	Company HST documents	15

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

1. GLOSSARY

Wherever the words “Company, Purchaser or Buyer” are used, it shall mean Karara Mining Limited.

Wherever the words “Contractor” is used it shall mean the person so named in the Contract (and its successors and permitted assigns) for construction work.

Wherever the words “Consultant” is used it shall mean the person so named in the Contract (and its successors and permitted assigns) for the study Work.

Wherever the words “Company’s Representative, Purchaser’s Representative or Buyer’s Representative” are used, it shall mean the person so named in the Contract (and its successors and permitted assigns).

Term	Definition
Authorities	Any statutory, public, municipal, governmental or administrative department, commission, authority, agency or entity with jurisdiction in connection with the WUC
Company’s Project Requirements	Has the meaning ascribed to it in the Contract
Company’s Representative’s nominee	Means an individual appointed in writing by the Company’s Representative under the Contract
Contract	The agreement between the Company and the Contractor to which this Scope of Work pertains
Consultant	Engineering Consultant appointed by the Company for the Design Works
DED	Detailed Engineering Design
DFS	Definitive Feasibility Study
ECM	Engineering and Construction Management
Execution Date	Means the date on which the Formal Instrument of Agreement is signed by the Company
Equipment	Means the goods to be supplied or supplied by the Supplier.
GPA	Geraldton Port Authority
HAZID	Hazard Identification
HAZOP	Hazard and Operability Review
HSEC	Health, Safety, Environment and Community
HV	High Voltage
IFC	Issued For Construction
ITP	Inspection and Test Plan
LV	Low Voltage

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

Term	Definition
MCC	Motor Control Centre
MDR	Manufacturers' Data Report
Mine site	The location of Karara Mine in the Mid-West Region of Western Australia, approximately 225 km East of Geraldton and 320 km Northeast of Perth
MIS	Management Information Systems
MTOs	Material Take Offs
P&IDs	Piping and Instrumentation Diagrams
PCS	Process Control System
PEP	Project Execution Plan
PFDs	Process Flow Diagrams
PFS	Pre-Feasibility Study
PLC	Programmable Logic Controller
PMC	Project Management Contracting
Port Site	Geraldton Port
QA / QC	Quality Assurance / Quality Control
SCADA	System Control and Data Acquisition
SDRL	Supplier Data Requirements List
SDS	Supplier Document Schedule
Services	means the services to be performed by the Contractor
SoW	Scope of Work
Tenderer	Means a person who lodges a tender for the Work
TIC	Total Investment Cost
Work	Includes Services and the supply of Equipment
WUC	Means the whole of the Work to be carried out under the contract

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

2. INTRODUCTION AND BACKGROUND

The Karara Iron Ore Project consists of mine, processing plant (magnetite concentrator), export terminal, rail, water, power, wet tailings storage facility, dry stack tailings storage facility and other infrastructure required to produce and export magnetite products from Karara site, which is located approximately 320 km north-north-east of Perth.

Karara Mining Ltd (KML) currently operates two types of tailings storage facilities (TSFs), i.e Dry Stack TSF and Wet TSF. These 2 facilities are located in the currently approved TSF area. The history of the wet TSF facilities of the Company are:

- Wet TSF 1 was completed in year 2015 & filled to its design capacity.
- Wet TSF 2A construction commenced in 2018 followed by its completion in 2019.
- Wet TSF 2B is currently in construction and is expected to be operational by 1st quarter of 2026.

KML plans to expand the wet tailing storage facility namely the wet TSF 2C within the current approved MS805 boundary. See the boundary shown in black line.

KML produces 12 million tonnes of tailings (dry) per annum. Currently 70% of tailings are filtered dry tailing and deposited with a conveyor stacking system. 30% of the tailings are wet tailings deposited into wet TSF. The new TSF 2C may be used for 100% wet tailings deposit in the future.

The wet tailings characteristics are briefly listed below:

The tailings slurry is thickened at the process plant to between 55% and 60% (by weight) solids, with an average of 57% solids. A design value of 55% solids is to be adopted for the Wet TSF design.

During 2016, KML observed some changes in the tailings material at the Dry Stack TSF and representative samples were collected by KML for geotechnical testing. In general, changes in the tailings material characteristics have mainly been in terms of moisture content due to filter performance.

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

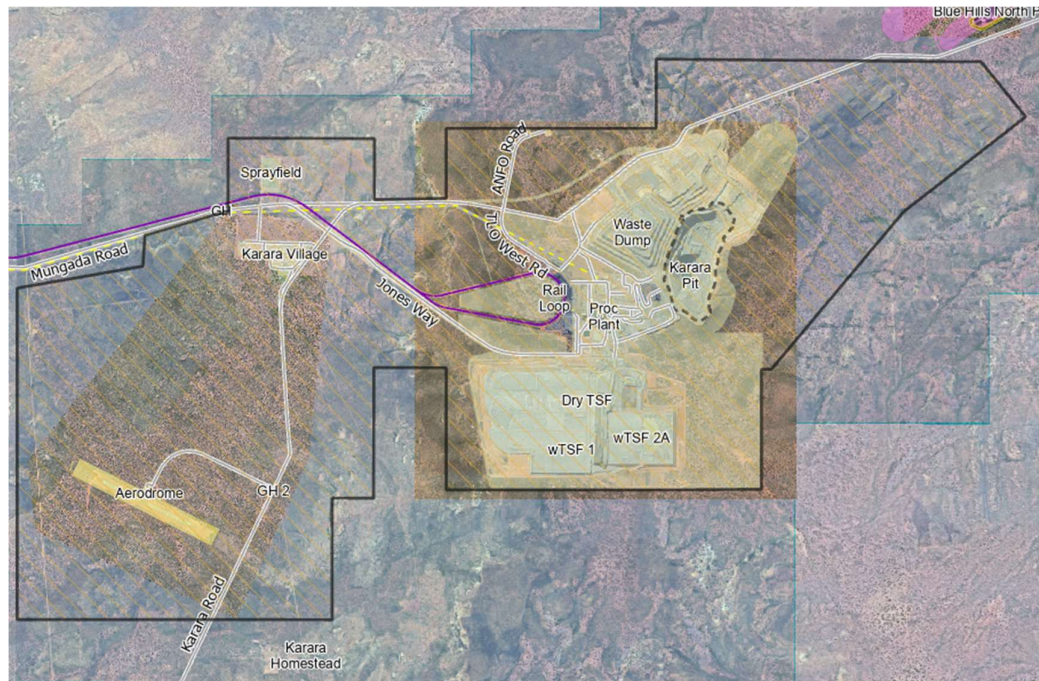


Figure 1: Overall KML's Operation



Figure 2: Approved MS805 Boundary (black line) for Mining Operation

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

3. SCOPE OF WORK

3.1 Introduction

The proposed work is to complete a pre-feasibility study (PFS) for the wet TSF 2C. At the conclusion of the pre-feasibility study, the Company will then select the most feasible option with the best investment return to proceed with the definitive feasibility study (DFS) and engineering design. The DFS and engineering design is the next stage of the work and will possibly carry out by the same Consultant.

The deliverable of the PFS shall include a PFS report for multiple options study with each option including but not limited to the following content:

- new wet TSF location,
- layout drawing and embankment profile of new TSFs that shows embankment raises,
- constructability study including construction materials,
- water loss study,
- project construction capital budgetary estimate with +/- 30% accuracy,
- construction timeframe,
- other critical factors or constraints that will impact the option such as environmental and regulatory requirements.
- A comprehensive comparison analysis for each option shall also be provided in the PFS with recommended option to proceed with engineering design for the next stage of the engagement.

The deliverables of the PFS also include:

- Meeting minutes
- Weekly meeting minutes and weekly reporting
- Review of project invoicing and cost control for the project

The following section summarises the work. This document shall be read in conjunction with the associated drawings and current plant layouts included in the package.

3.2 Scope of Services

The scope of work comprises of the following:

- Adopt Regulatory, code of practice and ANCOLD design guidelines in the design.
- Determine category classification of wet TSF 2C including determining the DMIRS hazard rating.
- Review existing reports, studies, drawings and all other documentations in developing the design basis for the study.
- Conduct the study work to the design basis and objectives.

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

- Conduct study for a life span of 20-25 years of wet TSF 2C.

3.3 Pre-Feasibility Study

3.3.1 Study Objectives

The Pre-feasibility study objectives include confirming the following:

- TSF 2C Options assessment
- A high level storage capacity estimation to determine the life span of facility
- Alternative design of embankment structural configuration
- Budgetary Investment cost estimate
- Environmental, operational consideration for the options
- Presentation of at least 3 options in the Pre-Feasibility Study Review Workshop.
- Submission of Pre-feasibility Study Report to KML

The above is to enable KML to select the best option for the DFS.

Alternating to the current use of tailings materials in the centre core of the embankment, consideration shall be given to use other material such as the mine waste (waste rock). Mine wastes are abundant on site and should be considered for use looking into their stable physical characteristic for the ease of meeting the moisture conditioning and the compaction requirements.

3.3.2 Design Options

The Consultant is to arrive with 3 design options for Company's consideration. The aerial views of the current facilities are presented below for better understanding of the current facilities:

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK



Figure 3: Plan View of TSFs

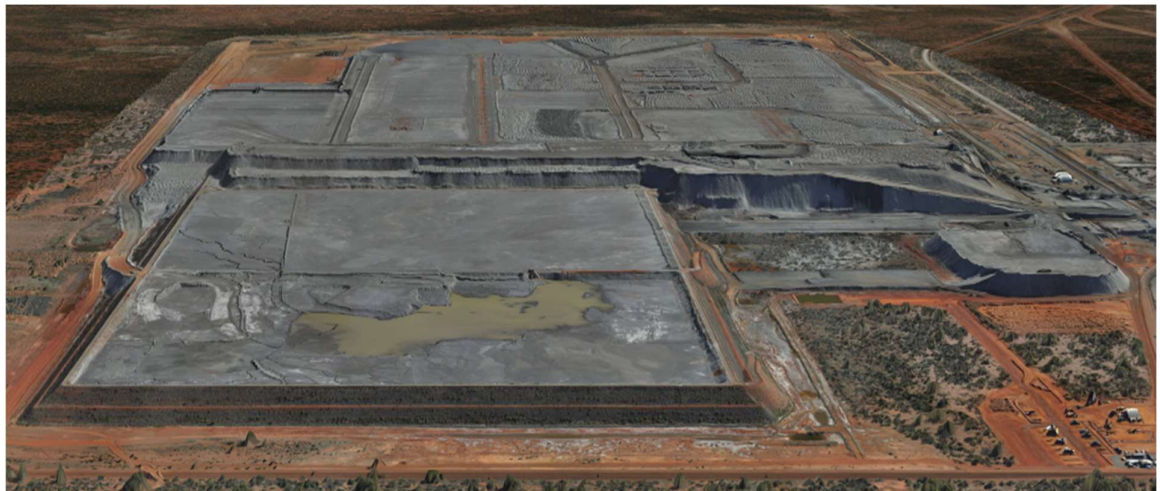


Figure 4: TSF - Looking WEST

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK



Figure 5: TSF - Looking EAST



Figure 6: TSF Looking NORTH



Figure 7: TSF Looking SOUTH

KARARA MINING LIMITED WET TSF 2C – PRE-FEASIBILITY STUDY WORK

The project footprint of the design options shall consider the practicality and the ease of construction overlaying or abutting the current facilities.

The layout design will need to consider the area or location for ancillary wet TSF infrastructure such as the access roads, borrow pits of materials, toe drains, seepage collection pond, groundwater monitoring bores, topsoil/vegetations stockpiles and potential indirect impacts to the surrounding vegetations, therefore an appropriate buffer (preferably at least 200m) would be required from the eastern and southern MS805 boundary. No disturbance is allowed outside of the current approved MS805 boundary.

The Company maintains up to date 3D model by regularly conducting drone survey over the TSFs. A recent topographic survey is attached with this tender pack.

3.4 Tailings Storage Lifts

The new wet TSF 2C shall be designed with multiple lifts. The maximum approved height of the TSF shall be 60m.

The aim is for the ease of increasing the storage capacity with the provision to increase the height of the embankments and thus prolong the service life of the facility.

The height extension can be either at the inside or outside of the dam with consideration of the ease of construction and the net storage capacity.

3.5 Better Utilization of Available Materials on Site

Current design of wet TSF 2A and 2B utilizes huge amount of dry tailings materials at the centre core of the embankment. See the typical cross section of the wet TSF embankment in the following figure.

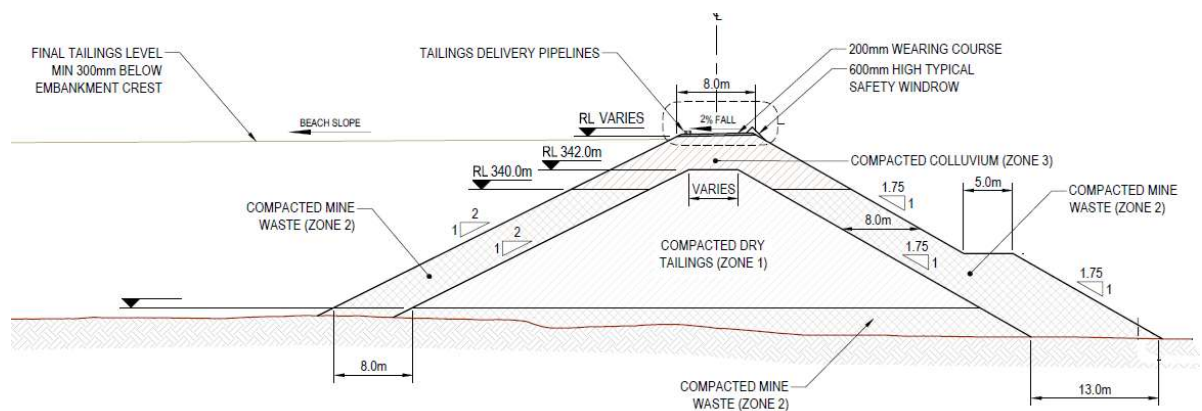


Figure 8: Current wet TSF Embankment Configuration

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

Filtered tailings materials are very homogenous and very fine. The physical properties are very consistent since the plant start-up. To ensure that the dry tailings materials are placed and compacted in acceptable lift thickness and to be structurally strong without heaving, the following works are necessary:

- Moisture conditioning to within a narrow range of the specified moisture content,
- Compaction by suitable machineries in agreed passes to achieve the compaction criteria,
- Protection from the rain-related wetting and ponding.
- Protection of placed layers against repetitive heavy loads, and
- Allowance of pore pressure dissipation and adjustment of the construction rate during the wet season.

The above poses construction challenges especially during the wet season.

Extensive tailings characteristic analysis has been done in the past. The analysis covers the:

- Slurry characteristics;
- Geotechnical and geochemical characteristics;

The following reports are available for review:

- Golder Associates Pty Ltd (August 2019), Dry Stack TSF and Temporary Wet TSF Investigation and Geotechnical Stability Analyses, Ref. 1896382-001-R-Rev0;
- Graeme Campbell & Associates, 'Geochemical Characterisation of Process-Tailings Samples', July 2007;
- Wave International on tailings property testing as part of Dry Stack design report (July 2015).

The mine wastes (waste rocks) are abundant on site. It is suggested to the consultant to consider using different structural configuration of the embankment by using more mine wastes. Mine waste is a more versatile and stable material in achieving the moisture content and to meet the compaction criteria. The consultant can adopt different structural configuration or learn from other mining company who has successfully implemented tailing embankment with such structural configuration.

3.6 Construction Cost Estimate

The Consultant shall prepare the CAPEX cost estimate for wet TSF construction for each option expressed in Australian Dollars (A\$) to an expected accuracy of $\pm 30\%$.

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

4. PROPOSED MILESTONES DATES

An estimated delivery schedule shall be developed with a summary of timeframes (in week number) for the Pre-feasibility for tender submission. The schedule shall consist of:

- Project Kick-off Meeting
- Study analysis
- Issue draft study Report for KML's review
- Issue Final PFS Report

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

5. COST PROPOSAL BASIS

The Consultant shall prepare and submit the cost proposal on schedule of rate basis with a not-to-exceed total budget figure for the Pre-Feasibility Study with the following cost breakdown as a minimum:

- Project Management
- Design Analysis
- Final Report Preparation

A detailed schedule of rates shall be provided by the Consultant.

6. REPORTS, PROCEDURES AND STANDARDS

6.1 Applicable Documents

All work covered by this Scope of Work shall comply with the applicable statutory requirements of Federal, State and Local Authorities of Australia, Mine Safety and Inspection Act 1994, Work Health and Safety (Mines) Regulations 2022 and shall comply with the nominated Codes, Standards and referenced standards within these.

All work to be furnished by the Engineering Consultant shall conform to the requirements of the following documents and they shall form part of the contract.

The Engineering Consultant shall note that if there is any doubt, the hierarchy of the documents are indicated below:

1. All Statutory Authorities having jurisdiction over the works
2. This Scope of Work document
3. The latest editions of relevant Company / Principal's Standards and Specifications
4. Standard Association of Australian Standards
5. All other relevant publications and regulations

Where Standards applicable to the work are not published by the Standards Association of Australia, then relevant International Standards shall apply subject to the written approval of the Company

6.2 Past Reports and Studies

The Company will supply the following reports, study for Consultant's reference:

Document No.	Title
25119_TSF Topo.zip	Topographic Survey of TSF
L128-GE-REP-0001	Construction Report Wet TSF 2A
L128-CI-REP-0001	Design Report – KML Wet Tailings Storage Facility 2A
L178-GE-REP-0001	Detailed Design Report – KML Wet Tailings Storage Facility 2B

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

L178-CI-SPC-1001	Wet TSF2B -Civil and earthworks Technical Specification
K4500021612 STC 300003253 PCN02 V1	Hydrological Assessment Dry Stack TSF by Stantec.
rpt_201203- 3253_karara_V1	Karara, Mungada and Hinge iron Ore Projects – Surface Water Hydrology Assessment by Stantec
L128-CI-MAN- 0001	Operating Manual for Wet Tailings Storage Facility 2A
181140208-001-M-Rev1	Golder Associates, (March 2019). Dam Break Assessment for Karara Wet Tailings Storage Facility
1300-CI-REP-1002_1	Geotechnical Assessment – Process Plant Site
CORP-GE-BOD-1001	Project Basis of Design
1896382-001-R_0	Dry Stack TSF and Temporary Wet TSF Investigation & Geotechnical Stability Analyses by Golder
20145888-001-R-Rev0	Golder Associates (2020). Karara Mining Tailings Storage Facilities – 2020 Annual Review of Operations,
21453105-001-M-Rev0	Golder Associates Member of WSP (28 June 2021). 2021 CPTU Investigation of Karara Dry Stack and Temporary Wet TSF.
Graeme Campbell & Associates (Mar 2007)	Geochemical Analysis of Top Soil, Regolith and waste rock bedrock samples
Graeme Campbell & Associates (July 2007)	KML Mine Site Wet Geochemical Characterisation of Process-Tailings Samples.
Graeme Campbell & Associates (May 2008)	Geochemical Characterisation of Mine waste and Process Tailing solids samples
K0191_F3_ENV_VS_TSF	Monitoring Locations_A4LB_RevA
Water Management Data and Graphs - Licence Compliance Report 2025.xls	Water Management Data and Graphs - Licence Compliance Report 2025
1319-CI-DRG-1103	Wet TSF 2B – Locality Plan & Drawing List
1319-CI-DRG-1104	Wet TSF 2B – GA
1319-CI-DRG-1105	Wet TSF 2B – Sections & Details sheet 1
1319-CI-DRG-1106	Wet TSF 2B – Sections & Details sheet 2
1319-CI-DRG-1107	Wet TSF 2B – Pipework - GA
1319-CI-DRG-1109	Wet TSF 2B – Piezometers - GA
1319-CI-DRG-1110	Wet TSF 2B – Piezometer – Sections and details

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

1319-CI-DRG-1113	Wet TSF 2B – Decant Arrangement - GA
L050-PI-DRG-0001	Delivery Pipelines - GA
L059-PI-DRG-0001	Pipe Connection Details

6.3 Company HST documents

The Company's Procedures and Standard for field related activity is provided for information. The list is not exhaustive. If available, the CORP- Corporate Standard shall be used, however if not available, the other referenced document shall apply. The issue of any new Corporate Standard shall supersede the equivalent referenced document.

Document No.	Title
CORP-GE-PLN-1002	Document and Data Management Plan
CORP-GE-LST-1003	Project Glossary
CORP-AD-FRM-1002	Document & Revision Numbering System
CORP-AD-FRM-1005	Work Breakdown Structure Coding
CORP-AD-FRM-1007	Plant Numbering System
CORP-PC-SPC-1002 <i>1000-PC-SPC-1002</i>	Contractor Progress Reporting and Planning Specifications
CORP-AD-SPC-1001	Supplier Data Instruction Specification
CORP-AD-SPC-1002	Contractor Data Requirements Specifications
CORP-QA-SPC-1001	Supplier Quality Requirements
CORP-QA-SPC-1003	Contractor Quality Requirements
CORP-EN-PLN-1001	Construction Environmental Management Plan
1000-PC-SPC-1002	Contractor Progress Reporting And Planning Specifications
CORP-EN-PRO-1009	Environmental Procedure - Flora, Weeds And Plant Pathogens
CORP-HS-PRO-1017	Lightning Management Procedure

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

1000-HS-FRM-1011	Critical Risk Assessment Register (Template) CRAW
CORP-AD-FRM-1050	Personnel Compliance Verification Form
CORP-EN-FRM-1009	Vehicle And Mobile Equipment Weed Inspection Form
CORP-EN-PLN-1008	Fauna Management Plan
CORP-EN-PLN-1010	Environmental Plan - Dust Management Plan
CORP-EN-PLN-1013	Environmental Waste Management Plan
CORP-EN-PLN-1020	Environmental Management Plan
CORP-EN-PRO-1009	Environmental Procedure - Flora, Weeds And Plant Pathogens
CORP-HS-FRM-1053	Mobile Plant, Equipment And Light Vehicle Access Request, Inspection And Risk Assessment Form
CORP-HS-FRM-1071	Confined Space Entry Permit
CORP-HS-FRM-1085	HSE Contractor Pre-Qualification Questionnaire
CORP-HS-FRM-1093	Confined Space Rescue Plan
CORP-HS-FRM-1160	Critical Risk Inspection Confined Space Entry
CORP-HS-PLN-1001	Karara Health And Safety Management Plan
CORP-HS-PLN-1003	Emergency Response Plan
CORP-HS-PLN-1011	Health, Safety And Training Pre-Mobilisation Requirements
CORP-HS-POL-1001	Karara Health And Safety Policy
CORP-HS-POL-1031	Fatigue Management Policy
CORP-HS-PRO-1007	Crane Management Procedure
CORP-HS-PRO-1008	Mobile Plant, Equipment And Light Vehicle Procedure
CORP-HS-PRO-1022	Site Entry Procedure
CORP-HS-PRO-1041	Oh&S Risk Management
CORP-HS-PRO-1052	Alcohol And Other Drugs Procedure

KARARA MINING LIMITED
WET TSF 2C – PRE-FEASIBILITY STUDY WORK

CORP-HS-PRO-1063	Respiratory Protection Procedure
CORP-HS-STD-1033	Lifting Equipment And Operations Standard
CORP-HS-STD-1042	Storage And Use Of Hazardous Substances Standard
CORP-TR-PRO-1003	Induction Procedure