KARARA
MINING LTD

# Karara Mining Limited

## Potential Acid Forming Material Management Procedure

CORP-EN-PRO-1051

1 October 2020

# SYNOPSIS

*This Potentially Acid Forming Material Management Procedure forms part of Karara Mining Limited Corporate Standards and describes the procedures specification that shall be used for all works within Karara Mining Limited.*

***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."*

**CORP-EN-PRO-1051- KARARA MINING LIMITED**

| REV | DESCRIPTION | ORIG | REVIEW | REVIEW | APPROVER | DATE |
|---|---|---|---|---|---|---|
| 1 | Review | C Courtauld | T Ennis-John | T Ennis-John | R Houlihan | 27-Feb-18 |
| 2 | Review | G Oliver | X Zhang | D Camm | Z Geng | 1-Oct-20 |

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# 1 PURPOSE AND SCOPE

The purpose of this procedure is to outline the stages of Karara Mining Limited's (KML) identification, management and disposal process for Potentially Acid Forming (PAF) waste rock material for the Greater Karara Iron Ore Project (the Project). For the purposes of this procedure, PAF waste rock material is classified as material with a total Sulphur assay greater than 0.30%.

This procedure shall be utilised by all staff and contractors working on the Project.

This procedure does not include land rehabilitation methods that are detailed within the Environmental Procedure – Land Rehabilitation CORP-EN-PRO-1002.

## 1.1 Objectives

The objectives of this procedure are to:

- Identify relevant legal obligations in relation to PAF material management and the processes in place to ensure these obligations are met; and
- Detail how to plan and undertake earthworks for appropriate PAF management.

This procedure supports the Environmental Management Plan (EMP) CORP-EN-PLN-1020, approved Mine Closure Plan (MCP) CORP-EN-PLN-1038, Environmental Procedure – Land Rehabilitation CORP-EN-PRO-1002 and other associated plans and procedures.

Compliance with this procedure and the requirements of both the EMP and MCP is mandatory.

## 2 DEFINITIONS

***Table 1: Definitions***

| Term | Definition |
|---|---|
| AER | Annual Environmental Report |
| BIF | Banded Iron Formation |
| DMIRS | Department of Mines, Infrastructure Regulation and Safety |
| EMP | Environmental Management Plan |
| GPS | Global Positioning System |
| INX | 'In Control' Event and Risk Management Software |
| Intermingled | PAF cells containing both PAF and other material requiring special containment (e.g. fibrous material). |
| KML | Karara Mining Limited |
| MCP | Mine Closure Plan |
| NAF | Non-Acid Forming |
| PAF | Potentially Acid Forming |
| PAPR | Powered Air-Purifying Respirator |
| The Project | Present and future KML mining and processing activities along with associated infrastructure |
| WA | Western Australia |
| WRD | Waste Rock Dump |

# 3 PLANNING

## 3.1 Legislation and Commitments

KML has made legal and other commitments in relation to PAF management as part of its compliance with relevant approvals and legislation under which the Project operates.

KML conduct and monitor PAF material management in accordance with the following Acts and associated approvals:

- *Biodiversity Conservation Act 2016* (WA)
- *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
- *Environmental Protection Act 1986* (WA)
- *Conservation and Land Management Act 1984* (WA)
- *Mining Act 1978* (WA)
- *Wildlife Conservation Act 1950* (WA)
- *Soil and Land Conservation Act 1945* (WA)
- *Contaminated Sites Act 2003* (WA)

For a detailed explanation of how each of the above Acts and associated approvals relate to the Project, contact the KML Environment Department.

As per KML's approved Mine Closure Plan CORP-EN-PLN-1038, KMLs key closure commitment to DMIRS and DWER is that final, rehabilitated landforms shall be safe, stable, non-eroding and non-polluting, allowing for the re-establishment of native vegetation as close as possible to its pre-disturbance condition. Secure long term storage of PAF is critical to KMLs ability to achieve this commitment.

## 3.2 Roles and Responsibilities

Table 2 (below) provides a summary of the roles and responsibilities to ensure compliance with legal requirements associated with the implementation of this procedure. The main body of the procedure should be referred to where clarification is required.

***Table 2: Roles and Responsibilities***

| Role | Responsibility |
|---|---|
| *KML Environment Superintendent; KML Environmental Department.* | • *Provide advice and assistance to the supervisors and operators on the implementation of this procedure onsite;*<br>• *Provide training to key personnel on this procedure;*<br>• *Conduct annual soil and vegetation monitoring, annual audits and raise corrective actions as required;*<br>• *Prepare an Intermingled PAF cell report post sign-off.*<br>• *Annual internal audits of this procedure will be undertaken by the Environment Department, with support from the Geology Department, as required.*<br>• *To verify that the Intermingled PAF cells are operating effectively, potential leachates from the PAF cells and WRD will be tested for acidity, salinity and heavy metals via adjacent surface water sampling sites. Sampling will be undertaken by the Environmental Department twice yearly at least 3 months apart;*<br>• *Once completed and signed-off, the information collected on the Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073 shall be provided to the KML Environment Department. All PAF data shall be maintained in the GIS database in accordance to the Environmental Procedure – Environment and Heritage Data Management CORP-EN-PRO-1045; and*<br>• *Project site audits and inspections shall be conducted according to the Audit Schedule. The Audit Schedule shall be maintained by the KML Environmental Department, and detail proposed dates for the audits and inspections and all personnel involved.* |

| Role | Responsibility |
|---|---|
| *KML Mine Operations Superintendent; Mining Department.* | • *Overall responsibility for implementation of this procedure onsite;*<br>• *Responsible for planning BIF and PAF material movement from the pit and subsequent placement within approved designed and constructed cell structures within the WRD;*<br>• *Responsible for coordinating works such that PAF material can be adequately identified (Geology Department) and quarantined; and*<br>• *PAF material management activities must be inspected and signed off using the Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073.*<br>• *Karara rainfall forecasts shall be assessed each week by the Mining Department to inform the Mining Contractor of PAF material covering;*<br>• *The survey data shall be provided to the Mining Department and checked against the mine plan to verify that all PAF has been placed correctly;*<br>• *The KML Mining Department is responsible for provision of an Intermingled PAF cell design within the designed WRD to the KML Environment Department prior to construction;*<br>• *KML Mining Department shall design specific Intermingled PAF cells for each WRD based on pit geology;*<br>• *The survey data shall be provided to the Mining Department and checked against the mine plan to verify that all PAF has been placed correctly;*<br>• *Monthly inspections by Mining Department shall verify if the Intermingled PAF cell construction is according to design, and will ensure contingency measures are in place; and* |

| Role | Responsibility |
|---|---|
| | • *Records to be maintained by the Mining Department with a copy sent to the Environmental Department mailbox (environment@kararamining.com.au).* |
| *KML Geology Superintendent; KML Geology Department.* | • *Supervise sampling programs to identify areas of PAF material. Delineate any PAF blocks. Forward PAF block GPS co-ordinates to the Mine Operations Superintendent and Mining Engineering Department and the Mining Contractor.*<br>• *Each stage of the Intermingled PAF cell construction (e.g. cell planning, construction and capping) shall be documented by the Contractor in the Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073. It shall be reviewed and signed-off by the KML Geology Superintendent; and*<br>• *Enter PAF information into the material movement database.*<br>• *KML Geology will continue to routinely test and review total sulphur content of ore and waste rock to ensure that reactive materials are appropriately managed;*<br>• *The KML Engineer, Mine Operations Superintendent and Contractor Project Manager are responsible for coordinating works such that PAF material can be adequately identified (KML Geology Department) and quarantined;*<br>• *On completion of the WRD, KML Environment Department, with support from the KML Geology Department and KML Mining Engineers, shall prepare a report to show compliance of Intermingled PAF cell construction with design specifications, detailing the location of the PAF cell/s, chemical composition and volumes of the waste material,* |

| Role | Responsibility |
|---|---|
| | *engineering constraints and capping material construction; and*<br>• *Annual internal audits of this procedure will be undertaken by the Environment Department, with support from the Geology Department, as required.* |
| *Mining Contractor* | • *Ensure compliance with the procedure;*<br>• *Ensure all relevant personnel are aware of the requirements of the procedure through education material and training;*<br>• *Ensure experienced and competent operators are utilised to conduct earthworks;*<br>• *Sign-off on completed Intermingled PAF cell;*<br>• *The KML Geology Department is responsible for defining blocks of inert BIF waste and PAF waste material and communicating this information via a Blend Plan and a Dig Plan (Appendix A) to the Mine Operations Superintendent, the Mining Engineering Department, and the relevant Mining Contractor, who must handle the material correctly as to this procedure;*<br>• *The placement of Non-Acid-Forming (NAF) waste and PAF waste rock within the WRD footprint will be surveyed monthly and demarcated by either KML's or the Mining Contractor's Survey Department;*<br>• *Signage, (provided by the Contractor), will also be used to clearly show where Intermingled PAF material cells are being or to be formed;*<br>• *Karara rainfall forecasts shall be assessed each week by the Mining Department to inform the Mining Contractor of PAF material covering;* |

| Role | Responsibility |
|---|---|
| | • *To verify correct thickness of material, Intermingled PAF cells shall be surveyed monthly by Mining Contractor and just prior to and after completion (i.e. prior to and after capping);*<br>• *The Contractor shall maintain training records that will include a record of attendance as a minimum and forward these records to KML Environmental and Safety Departments for upload onto INX and training registers;*<br>• *The Contractor conducting earthworks is required to discuss the status of the Intermingled PAF cell construction as a regular component of their toolbox and site meeting agendas. KML will regularly meet with the Contractor to discuss the works as they progress;*<br>• *The KML Engineer, Mine Operations Superintendent and Contractor Project Manager are responsible for coordinating works such that PAF material can be adequately identified (KML Geology Department) and quarantined;*<br>• *Once the Intermingled PAF cell is signed off as complete, the Contractor shall transfer responsibility to manage the rehabilitation to KML; and*<br>• *Maintain all documentation (hard copy, electronic and emails) for inspection during audits.* |
| *Operational staff (Pit technicians, digger/truck/bulldozer operators)* | • *Conduct material identification, sampling and earthworks in accordance with the procedure*<br>• *Report and document any PAF material to the Contractor supervisor and KML; and*<br>• *Attend training as required.* |

### 3.3 Competence, Training and Awareness

All personnel identified in 'Roles and Responsibilities' are required to undertake the KML's Environment Department Rehabilitation Toolbox Training for PAF material prior to commencing any PAF material works, in addition to completion of KML's Safety Procedure – Training and Induction CORP-HS-PRO-1001.

The Contractor shall maintain training records that will include a record of attendance as a minimum and forward these records to KML Environmental and Safety Departments for upload onto INX and training registers.

The Contractor conducting earthworks is required to discuss the status of the Intermingled PAF cell construction as a regular component of their toolbox and site meeting agendas. KML will regularly meet with the Contractor to discuss the works as they progress.

# 4 IMPLEMENTATION AND OPERATION

## 4.1 Mine Material Characterisation

Mine site materials such as ore, benign and reactive waste rock, tailings, cover materials, soils, shale and some dolerite are the main waste types generated from the pits in the Karara region. Material identification is required to ensure that PAF material (material that has a total Sulphur assay greater than 0.30%) is characterised and appropriately quarantined within the WRD. Mine material characterisation is also required to ensure the most appropriate Banded Iron Formation (BIF) waste rock material (non-eroding, non-acid forming, inert material) is selected, transported and stockpiled for use in Intermingled PAF cell construction. Encapsulation of PAF material is detailed in Section 4.2 of this procedure.

The inappropriate material characterisation and placement during Waste Rock Dump (WRD) construction can compromise the KML mine closure objectives for a safe, stable and non-polluting landform. The KML Geology Department is responsible for defining blocks of inert BIF waste and PAF waste material and communicating this information via a Blend Plan and a Dig Plan (Appendix A) to the Mine Operations Superintendent, the Mining Engineering Department, and the relevant Mining Contractor, who must handle the material correctly as to this procedure. The Mine Operations Superintendent and/or Mining Engineers are responsible for planning BIF and PAF material movement from the pit and subsequent placement within approved designed and constructed cell structures within the WRD.

All major mine material classifications are presented within the resource block model. Expected, and potential ore are further quantified by laboratory assay results from blast-hole sampling and delineated through geostatical computer modelling. Assay results are recorded in GEORGE (the geology database). Mining block information is recorded in the MineMarket database. If returned assay results indicating PAF material are spatially numerous and close enough together to allow for delineation, the PAF block is defined spatially during computer modelling and select mining of this area will occur.

The placement of Non-Acid-Forming (NAF) waste and PAF waste rock within the WRD footprint will be surveyed monthly and demarcated by either KML's or the Mining Contractor's Survey Department. Signage, (provided by the Contractor), will also be used to clearly show where Intermingled PAF material cells are being or to be formed.

The KML Mining Engineers and Manager Environment & Community are responsible for ensuring that PAF material is considered when planning rehabilitation.

## 4.2 Identification and Management of Spontaneous Combustion PAF material

Spontaneous combustion of mine waste is usually associated with coal mines and occurs to a lesser extent with ore deposits containing pyrite ($FeS_2$), sulphide minerals and carbonaceous materials. The oxidation of pyrite is exothermic and can lead to a significant increase in heat.

The spontaneous combustion is usually associated with the exposure of the material to atmospheric oxidation or contact with oxygenated water (rainwater). The oxidation of sulphides results in a gradual increase in temperature which over time can become high enough to ignite carbon that may be present (Black shales), releasing smoke, steam and hazardous gases such as $H_2S$. Spontaneous combustion is time dependent, and early detection of the problem may allow management of the situation from developing into combustion.

Main detection characteristics include temperature increases, gas odour and observation of heat haze as well as efflorescence caused by oxidation of pyrite and sublimation of sulphur.

Once detected, all staff involved in the management of the material should wear a Gastech gas detector and PAPR (Powered Air-Purifying Respirator) unit fitted with Versaflo TR-6580ANZ filters.

Effective control of spontaneous combustion is usually achieved by use of a combination of techniques.

- Reduce or eliminate oxygen (compaction and or covering with NAF material);
- Reduce temperature (water spraying, water cannons or submerging in water);
- Spreading the material into thin piles/lines to allow cooling before encapsulation.
- Where practicable planning disturbance of potentially spontaneous combustible PAF material around high rainfall periods and minimising the area/volume disturbed at any one time.

## 4.3 Intermingled PAF cell Design and Construction

The KML Mining Department is responsible for provision of an Intermingled PAF cell design within the designed WRD to the KML Environment Department prior to construction. WRD landforms shall be constructed in accordance with the engineering design outlined in the mining proposal.

Intermingled PAF cells are quarantine cells located within the WRD for containment of PAF material; PAF material must be contained on all sides by compacted low permeability NAF waste, isolating it from groundwater and surface water. PAF material shall be covered progressively during mining activities with a dry cover of suitable NAF materials to minimise the influx of water and reduce exposure to oxygen. NAF material within the sides and final cap layer shall be ≥3 m in thickness and intermediate NAF covers shall be >1 m in thickness.

The KML Principal Mining Engineer will update the inventory of materials at least annually to ensure that there are adequate quantities of NAF materials suitable for encapsulating PAF material or other wastes requiring containment. PAF material shall be covered with NAF material prior to forecast rainfall events of >15 mm. Karara rainfall forecasts shall be assessed each week by the Mining Department to inform the Mining Contractor of PAF material covering.

The final PAF cell cap layer shall:

- Be constructed from clay or equivalent low permeability NAF material;
- Be ≥3m in depth from all exposed surfaces;
- Be compacted by heavy machinery by track rolling the top to remove voids and inhibit water penetration; and
- Have a gradient to encourage diversion of surface water flows away from the quarantine cell, and prevent ponding over the cell.

Figure 1 provides the basic methodology for Intermingled PAF cell construction while Figure 2 shows the conceptual design for the Intermingled PAF cell and specific design criteria. KML Mining Department shall design specific Intermingled PAF cells for each WRD based on pit geology. Figure 3 indicates a conceptual design of Intermingled PAF cells in the WRD.

***Figure 1: Schematic diagram of NAF material cap placement over Intermingled PAF cell.***

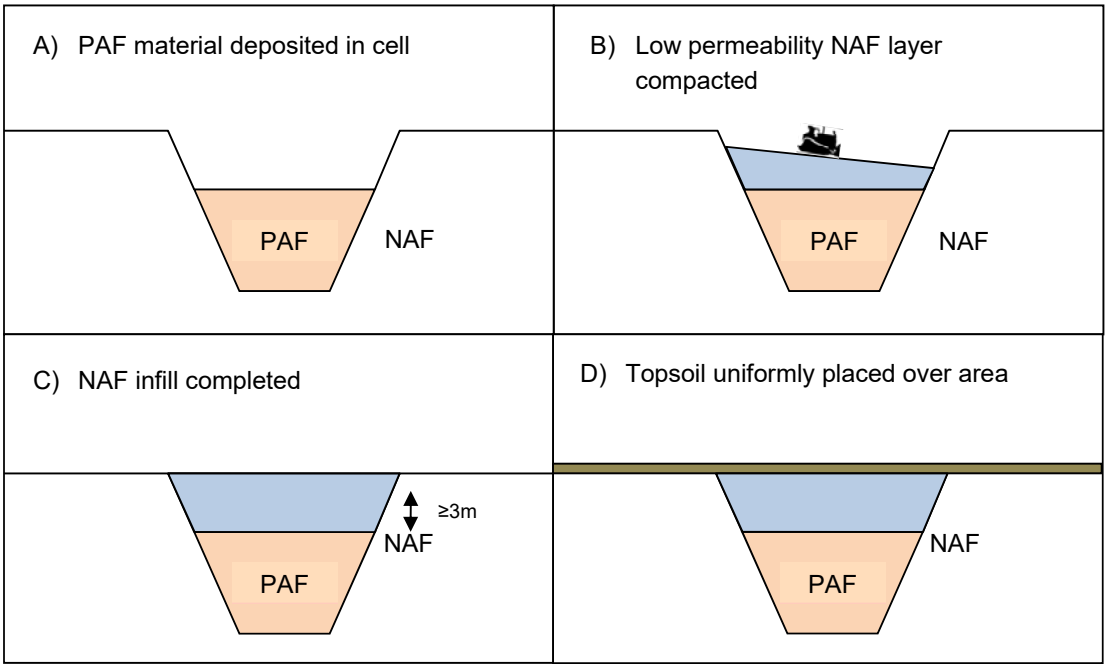



***Figure 2: Conceptual design of waste rock isolation cell cross-section***

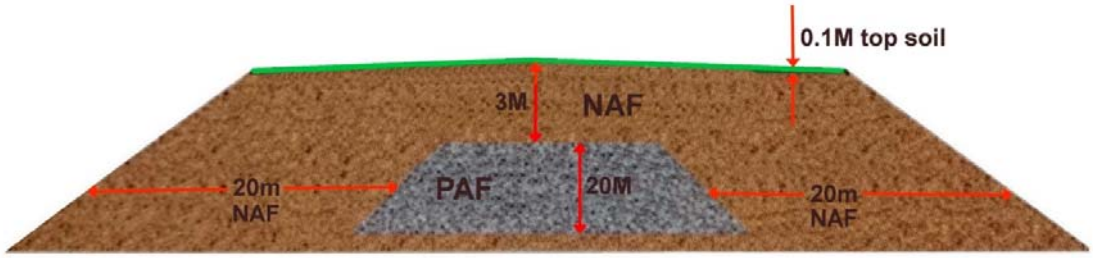
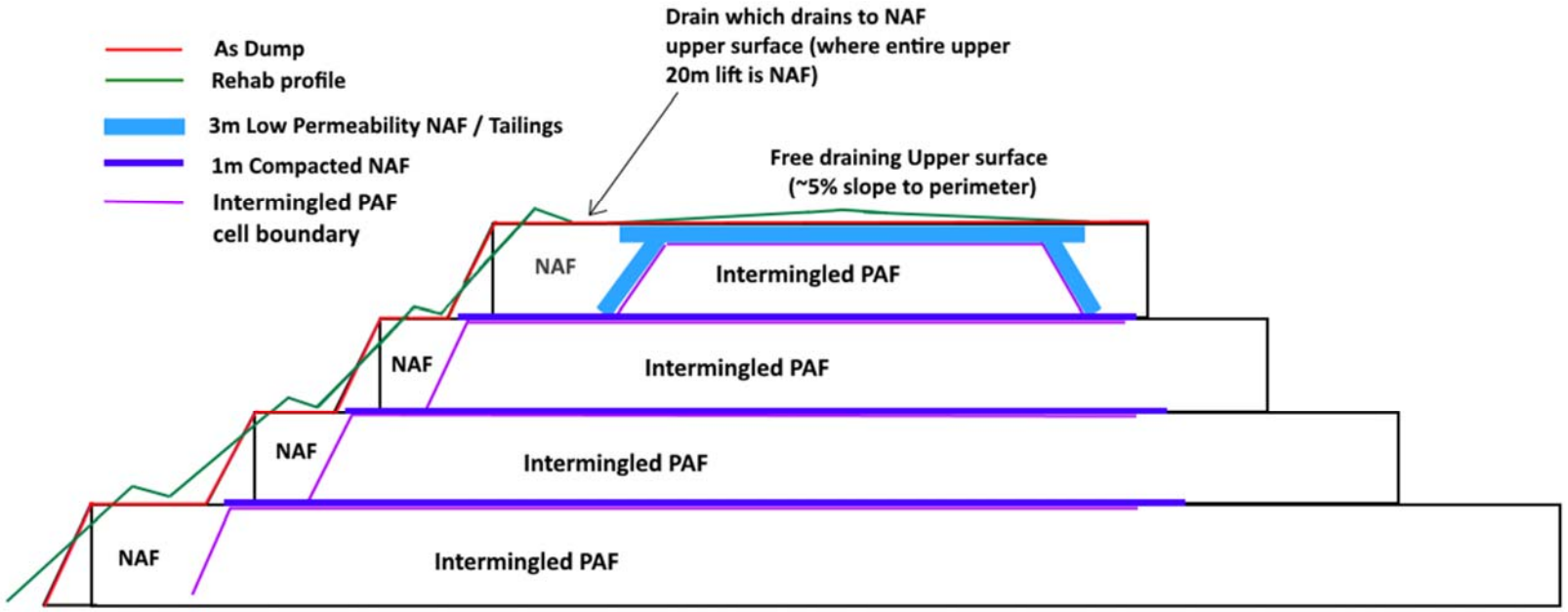


*Figure 3: Conceptual design of Intermingled PAF cells in WRD*



## 4.4 Inspection and Cell Construction Signoff

To verify PAF has been encapsulated to the correct cover thickness, Intermingled PAF cells shall be surveyed by Mining Contractor prior to and after completion of capping. The survey data shall be provided to the Mining Department and checked against the mine plan and WRD closure design to verify that all PAF has been placed correctly. The Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073 shall be completed prior to capping of each cell and on completion of each cell within the WRD.

Monthly inspections by Mining Department shall verify if the Intermingled PAF cell construction is according to design, and will ensure contingency measures are in place for:

- Potential PAF volumes exceeding Intermingled PAF cell design
- Potential differences between design and construction of WRD
- No cell available for PAF deposition (i.e. due to delay in construction or unforeseen volumes of PAF)

Contingency measures shall include:

- Temporary storage of PAF material bunded with NAF
- Updating the inventory of materials at least annually to ensure adequate quantities of NAF materials are available for encapsulation of PAF material
- Additional testing to confirm NAF and PAF waste characterisation where there is uncertainty

The Mining Department shall inspect the PAF cell construction at key milestones as follows:

- At completion of NAF Cell shell prior to deposition of PAF material
- at completion of compaction of deposited PAF
- at completion of covering of the cell

The Contractor is responsible for contacting the KML Mining Department to arrange inspections at key milestones. Any actions raised during inspections shall be recorded in INX for rectification. Re-inspection will be undertaken prior to commencement of the next stage of WRD construction and PAF material disposal.

Details on the volume (by aerial extent and thickness) and location of the PAF material shall be captured as an attachment to the PAF cell signoff form prior to signoff. The form shall be reviewed and signed-off by the KML Geology Superintendent, Mining Engineer, Mine Operations Superintendent and Contractor Manager to confirm that works have been completed in accordance with this procedure. Records to be maintained by the Mining

Department with a copy sent to the Environmental department mail box (environment@kararamining.com.au).

Once the Intermingled PAF cell is signed off as complete, the Contractor shall transfer responsibility to manage WRD rehabilitation to KML.

Refer to the Environmental Procedure – Land Rehabilitation (CORP-EN-PRO-1002) for further details on the land rehabilitation process (i.e. shaping the landform, topsoil application, ripping and revegetation).

## 4.5 Monitoring

KML Geology will continue to routinely test and review total sulphur content of ore and waste rock to ensure that reactive materials are appropriately managed.

To verify that the Intermingled PAF cells are operating effectively, potential leachates from the PAF cells and WRD will be tested for acidity, salinity and heavy metals via adjacent surface water sampling sites. Sampling will be undertaken by the Environmental Department twice yearly at least 3 months apart.

## 4.6 Timing & Scheduling

The KML Engineer, Mine Operations Superintendent and Contractor Project Manager are responsible for coordinating works such that PAF material can be adequately identified (KML Geology Department) and quarantined.

Rehabilitation earthworks are scheduled around the seasons to ensure final surfaces are in place before the onset of seasonal rainfall (April) so as to minimise the influx of water and exposure of PAF material to oxygen.

# 5 RECORD KEEPING AND REPORTING

Any deviation from this Procedure without approvals in accordance the KML Change Management Procedure (CORP-HS_PRO-1065) will be considered an incident and must be reported in accordance with the KML Incident Management Procedure CORP-HS-PRO-1046.

An incident report is also to be generated if monitoring identifies actual or potential impacts to vegetation due to PAF material (i.e. soil and water with pH of <6). Such occurrences will be investigated and corrective actions assigned where necessary.

## 5.1 Corrective Actions and Contingencies

Where PAF material management is identified as not meeting the requirements of this procedure or issues have been detected during inspections using the Environment Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073 or Environmental Form – Land Rehabilitation Inspection CORP-EN-FRM-1017, the KML Site Environment Department will submit an Incident Report via the Safety Procedure – Incident Management Procedure CORP-HS-PRO-1046. Such occurrences will be documented in INX and investigated as per the incident reporting system with corrective actions assigned.

Where the results of monitoring indicate a deviation from this procedure, corrective actions will be undertaken upon consultation with the Geology and Mining Departments and as per this Procedure. For example, if the NAF cover thickness or material type of the Intermingled PAF cell does not meet requirements, then the cell will require additional NAF capping. Further land rehabilitation will be carried out as determined by the KML Environment Department upon completion of the works to meet closure objectives and completion criteria detailed in the approved MCP.

KML utilises InControl for recording all preventative and corrective actions raised and closeout details shall be maintained. The close out details shall include the date closed and the name of the person verifying completion of the required action.

## 5.2 Control of Records

Each stage of the Intermingled PAF cell construction (e.g. cell planning, construction and capping) shall be documented by the Contractor in the Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073.

Once completed and signed-off, the information collected on the Environmental Form – Intermingled PAF cell Construction Signoff CORP-EN-FRM-1073 shall be provided to the KML Environment Department. All PAF cell spatial data shall be maintained in the GIS database in accordance to the Environmental Procedure – Environment and Heritage Data Management CORP-EN-PRO-1045.

## 5.3 External Reporting

Summary details of each Intermingled PAF cell shall be recorded for inclusion in the Annual Environmental Report (AER) submitted to the Department of Mines, Industry Regulation and Safety (DMIRS, formerly Department of Mines and Petroleum).

On completion of the WRD, KML Environment Department, with support from the KML Geology Department and KML Mining Engineers, shall prepare a report to show compliance of Intermingled PAF cell construction with design specifications, detailing the location of PAF cell/s, chemical composition, volumes of PAF, engineering constraints and capping material construction. A summary of this information will be integrated into the triennial MCP update to satisfy DMIRS requirements.

## 5.4 Audits and Inspection

KML will undertake annual audits and random inspections at waste rock storage areas to check that material is being stored appropriately and to confirm the integrity and effectiveness of the Intermingled PAF cell.

Annual internal audits of this procedure will be undertaken by the Environment Department, with support from the Geology and Mining Departments, as required. KML shall also audit the construction of the landforms, Intermingled PAF cell and abandonment bund showing compliance with closure objectives and completion criteria detailed in the approved MCP.

Project site audits and inspections shall be conducted according to the Audit Schedule. The Audit Schedule shall be maintained by the KML Environmental Department, and detail proposed dates for the audits and inspections and all personnel involved. Audit findings shall be recorded in InControl for including allocation of actions and tracking action close out. The InControl entry details shall include:

- The source of the action (i.e. audit, inspection or other);
- The action required;
- Target close out date;
- Actual close out date; and
- The person responsible for the action item.

## 6 DOCUMENTS LIST

The documents referred to in this procedure are listed in Table 2 below.

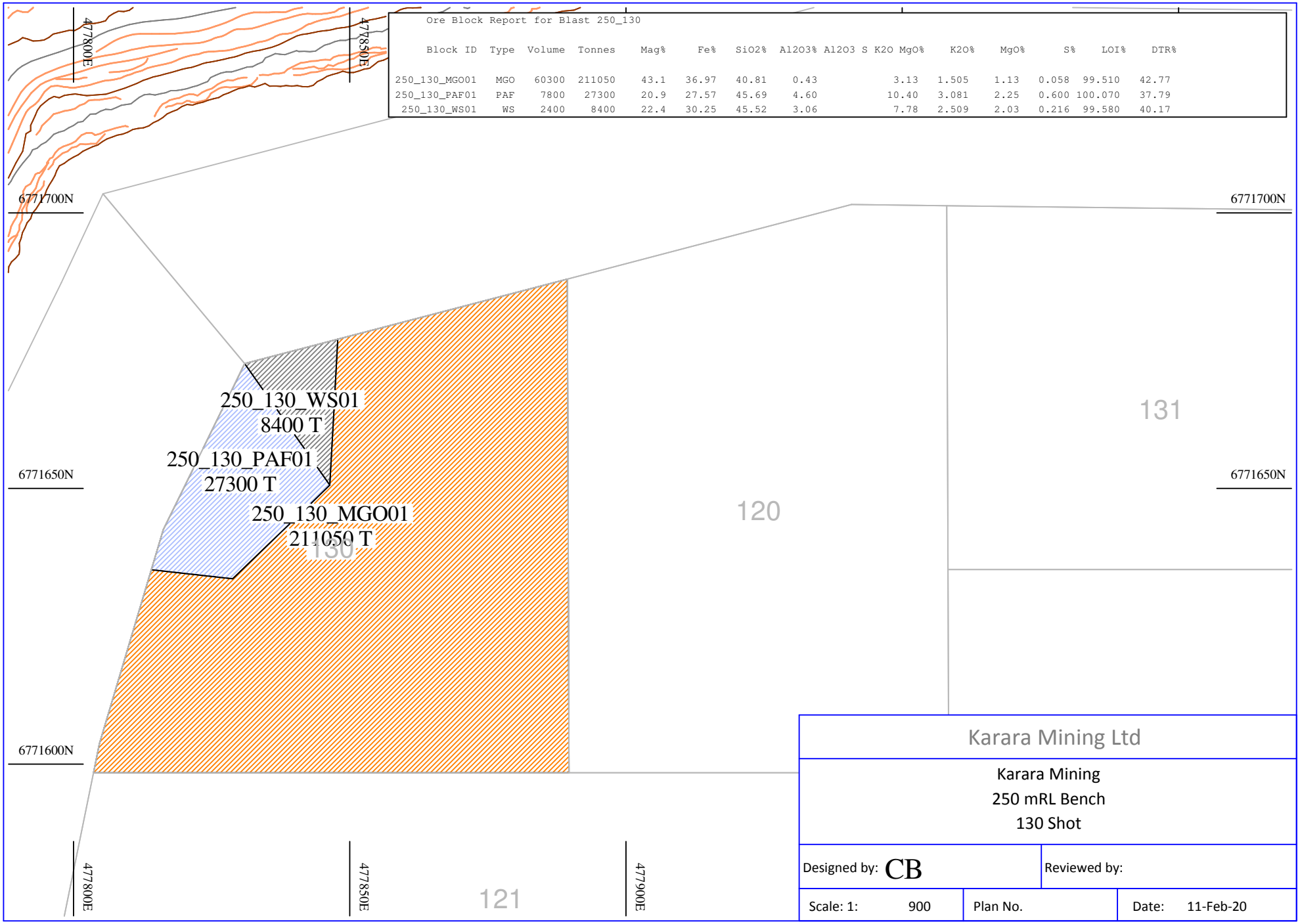
***Table 2: Document List***

| Document Title | Document Number |
|---|---|
| Environmental Form – Contractor Monthly Report | CORP-EN-FRM-1001 |
| Environmental Form – Land Rehabilitation Inspection | CORP-EN-FRM-1017 |
| Environmental Form – Intermingled PAF cell Construction Signoff | CORP-EN-FRM-1073 |
| Environmental Plan – Environmental Management Plan | CORP-EN-PLN-1020 |
| Environmental Plan - Mine Closure Manual | CORP-EN-PLN-1038 |
| Safety Procedure – Training and Induction | CORP-HS-PRO-1001 |
| Environmental Procedure – Land Rehabilitation | CORP-HS-PRO-1002 |
| Safety Procedure – Incident Management Procedure | CORP-HS-PRO-1046 |
| Environmental Procedure – Environment and Heritage Data Management | CORP-EN-PRO-1045 |

# APPENDIX A: EXAMPLE DIG PLAN AND BLEND PLAN FOR PAF MATERIAL MOVEMENT

Ore Block Report for Blast 250_130

| Block ID | Type | Volume | Tonnes | Mag% | Fe% | SiO2% | Al2O3% | Al2O3 | S | K2O | MgO% | K2O% | MgO% | S% | LOI% | DTR% |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250_130_MGO01 | MGO | 60300 | 211050 | 43.1 | 36.97 | 40.81 | 0.43 | | | 3.13 | 1.505 | 1.13 | 0.058 | 99.510 | 42.77 | |
| 250_130_PAF01 | PAF | 7800 | 27300 | 20.9 | 27.57 | 45.69 | 4.60 | | | 10.40 | 3.081 | 2.25 | 0.600 | 100.070 | 37.79 | |
| 250_130_WS01 | WS | 2400 | 8400 | 22.4 | 30.25 | 45.52 | 3.06 | | | 7.78 | 2.509 | 2.03 | 0.216 | 99.580 | 40.17 | |




Karara Mining Ltd

Karara Mining
250 mRL Bench
130 Shot

Designed by: CB | Reviewed by:

Scale: 1: 900 | Plan No. | Date: 11-Feb-20

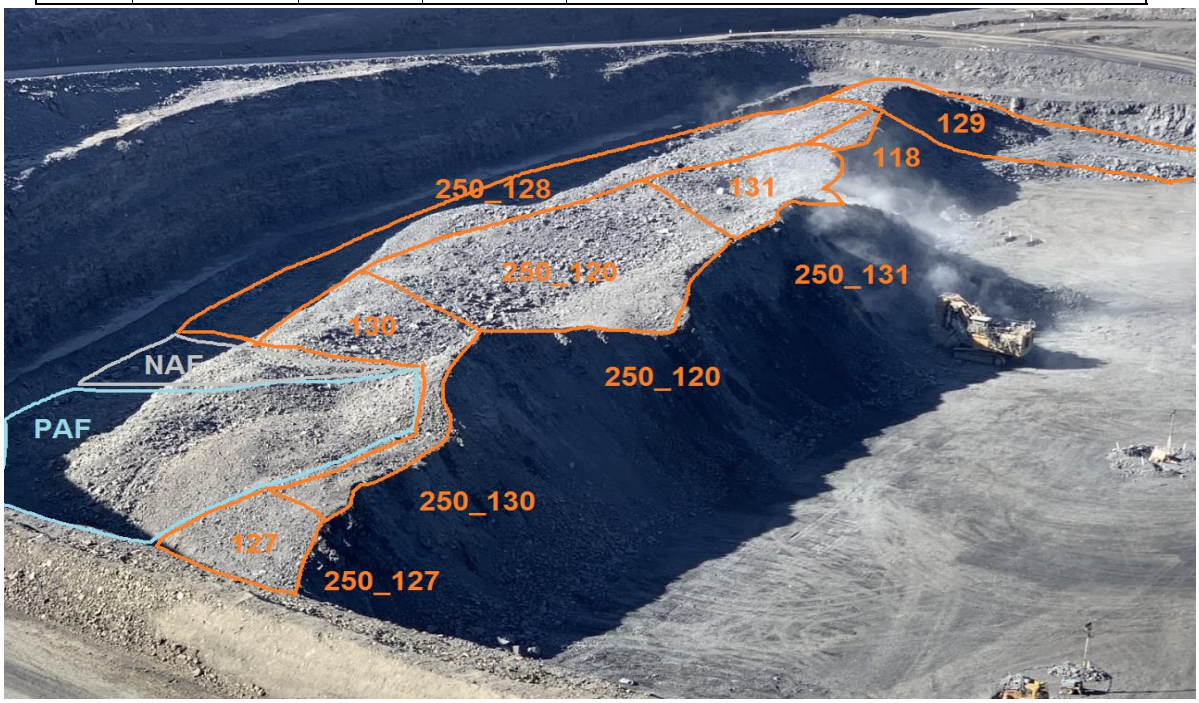
digplan_250_130

SURPAC - Gemcom Software

KARARA
MINING LTD

| Day Shift | | 14/07/2020 | | |
|---|---|---|---|---|
| Priority | From | Material | TO | Comments |
| #1 | 250_131 /120 /130 /127 /118 /129 | MGO | | BEWARE THE PAF/NAF BLOCKS , NOW VERY CLOSE TO THE FACE |
| Backup #1 | 238_131 /130 /128 /132 /125 | MGO | | [TO EXPOSE MISFIRE ] |
| Backup #2 | ROM | MGO MGP | | |

| Night Shift | | 14/07/2020 | | |
|---|---|---|---|---|
| Priority | From | Material | TO | Comments |
| #1 | 250_131 /120 /130 /127 /118 /129 | MGO | | BEWARE THE PAF/NAF BLOCKS , NOW VERY CLOSE TO THE FACE |
| Backup #1 | 238_131 /130 /128 /132 /125 | MGO | | [TO EXPOSE MISFIRE ] |
| Backup #2 | ROM | MGO MGP | | |





**Please contact KML Geology (0488 149 047) to authorise any changes to the plan.**

**Approved by KML Geology:**

**Signature:** Craig Bosel