

# PROPOSED STOCKPILE ACTIVITIES ON A PORTION OF PORTION 1 OF FARM RUIGTEVLEY 97 KQ, THABAZIMBI LOCAL MUNICIPALITY, LIMPOPO PROVINCE.

## CLOSURE PLAN



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***REFERENCE NUMBER: 12/1/9/1-W302***

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## EXECUTIVE SUMMARY

Greenmined Environmental (Pty) Ltd is the consultants responsible for the environmental authorisation application, and in light of this, an Annual- and Final Rehabilitation, Decommissioning and Closure Plan (*in alius verbis* Closure Plan) was accordingly drafted for the proposed stockpile area.

The purpose of this document is to provide site management with an Annual Rehabilitation Plan as well as the Final Rehabilitation, Decommissioning and Closure Plan, compiled in terms of the NEMA Amendment Act, 2014 (Act No. 25 of 2014). The amendment of the closure plan entails a review of the following aspects:

1. Annual rehabilitation as reflected in the annual rehabilitation plan;
2. Final rehabilitation, decommissioning and closure of the stockpile operations at the end of the life of operations as reflected in the final rehabilitation, decommissioning and closure plan;
3. Remediation of latent or residual environmental impacts, which may become known in the future, as, reflected in the environmental risk assessment report.

### Rehabilitation, Decommissioning and Closure Plan:

The decommissioning phase will entail the reinstatement of the stockpile area by removing the stockpiled material, and site infrastructure/equipment and landscaping the disturbed footprints. The reinstated area will be seeded with an appropriate grass mix.

The decommissioning activities will therefore consist of the following:

- Removing all stockpiled material;
- Removing all machinery and equipment from site;
- Landscaping all disturbed areas and replacing the topsoil;
- Vegetating the reinstated area; and
- Controlling/monitoring the invasive plant species.

The future land use of the proposed area will be agriculture. Upon replacement of the topsoil, the area will once again be available for grazing purposes, and the planting of the cover crop (upon request from LEDET) will tie in with the proposed land use.

## Environmental Risk Assessment Report:

At this stage, no latent risks that will potentially arise during closure phase of the stockpile area were identified. By reason of the fact that no latent risks with regard to the management of the stockpile area were identified no additional monitoring, auditing or reporting requirements are required at this stage.

### **LIST OF ABBREVIATIONS**

BAR	Basic Assessment Report
DWS	Department of Water and Sanitation
EIA	Environmental Impact Assessment
EPA	Environmental Performance Assessment
EMPR	Environmental Management Program
I&AP's	Interested and Affected Parties
NWA	National Water Act, 1998 (Act No. 36 of 1998)
NEMA	National Environmental Management Act, 1998 (Act No. 107 of 1998)
NEM:WA	National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008)
LEDET	Limpopo Provincial Department of Economic Development, Environment & Tourism
WCMR	Waste Classification and Management Regulations
WWF	World Wildlife Fund

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## 1. INTRODUCTION

The applicant Inzalo Crushing and Aggregates (Pty) Ltd, applied for environmental authorisation (EA) to establish an area for stockpiling and crushing/screening (if needed) of mined material, on 11.7 ha over a disturbed area of the farm previously used for mining activities on a portion of Portion 1 of Farm Ruigtevley 97 KQ, Thabazimbi Local Municipality, Limpopo Province.

Greenmined Environmental (Pty) Ltd (“Greenmined”) is the consultants responsible for the environmental authorisation application, and in light of this, an Annual- and Final Rehabilitation, Decommissioning and Closure Plan (*in aliis verbis* Closure Plan) was accordingly drafted for the proposed stockpile activities. This report (the Closure Plan) stipulates the rehabilitation methods to be followed in the restoration of the earmarked stockpile footprint. The report was compiled in line with Government Notice 940 of the National Environmental Management Act, 1998 [NEMA] (Act No. 107 of 1998). The information used in this report was sourced during the EIA process.

The purpose of this document is to provide site management with a Final Rehabilitation, Decommissioning and Closure Plan, compiled in terms of the NEMA Amendment Act, 2014 (Act No. 25 of 2014).

### 1.1 PROJECT PROPOSAL

The infrastructure to be used on site will all be of temporary and mobile nature. Containers will be used for office and storage purposes and a weigh bridge will be established (temporary). The storage of fuel (if any) will be below the threshold of the NEMA EIA listed activities. The proposed stockpile area, and the plant will be powered with generators. The ablution facilities will be chemical toilets that will be serviced by registered suppliers. The office and storage containers, weigh bridge and ablution facilities will most likely be placed at the entrance to the site, while the crushing equipment will be of mobile nature, moving around the site as needed.

During the site establishment phase the applicant will clear the topsoil from the stockpiling area to allow the stockpiling of the material. Upon stripping, the topsoil will be stockpiled along the boundaries of the area to be used during the rehabilitation phase. The material will be screened/crushed if needed and stockpiled until removed from site.

Should this application be successful, the Applicant intends to:

1. demarcate the boundaries of the stockpile area;
2. strip the topsoil off the earmarked area and stockpile it for later use in rehabilitation;

3. stockpile the processed material in various size categories within the boundaries of the approved area;
4. process the material through crushing and screening;
5. load and transport the material from the stockpiles onto trucks

Considering this, the Applicant intends to establish the following infrastructure within the boundaries of the proposed area:

- Mobile crushing and screening infrastructure;
- Mobile containers that will be used for offices and storage purposes; and
- Ablution facilities to be used by all employees.

Should the EA be issued, and the proposed activity be allowed, the project will comprise of activities that can be divided into three key phases (discussed in more detail below) namely the:

- (1) *Site establishment/construction phase* which will involve the demarcation of the authorized area. Site establishment will also necessitate the clearing of vegetation, the stripping and stockpiling of topsoil, and the introduction of machinery and equipment.
- (2) *Operational phase* that will entail the stockpiling and crushing (when needed) of the material mined from the quarry on the property until it is transported from site.
- (3) *Decommissioning phase* which entails the rehabilitation of the affected environment. If needed, the EA holder will further be responsible for the seeding of all rehabilitated areas.

## **1.2 OBJECTIVE OF THE CLOSURE PLAN**

The purpose of the Closure Plan is to describe the rehabilitation processes that need to take place to ensure that the stockpile area reaches its full environmental potential upon closure.

The primary objective, is to obtain a closure certificate at minimum cost and in as short a period as possible whilst still complying with the requirements of the Government Notice 940 of the National Environmental Management Act, 1998 [NEMA] (Act No. 107 of 1998).

To realise this, the following main objectives must be achieved:

- Remove all temporary infrastructure and waste from the site as per the requirements of the EMPR.



- Ensure that permanent changes in topography are sustainable and do not cause erosion or the damming of surface water.
- Use the topsoil effectively to promote the re-establishment of vegetation.
- Ensure that all rehabilitated areas are stable and self-sustaining in terms of vegetation cover.
- Eradicate all weeds/invader plant species by intensive management of the site.

## 2. DETAILS OF THE AUTHOR

The Applicant, Inzalo Crushing and Aggregates (Pty) Ltd, appointed Greenmined Environmental to prepare the final rehabilitation, decommissioning and closure plan. Ms Z. Norval has a Bsc degree in Environmental Science and an Honours degree in Botany. In her Honours year, she focused mainly on environmental assessments and geographic information systems. Please find full CV attached in Appendix G.

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Declaration of Independence:

I, Zoë Norval, in my capacity as environmental control officer declare that–

- I act as independent environmental control officer in this compliance audit;
- I will perform the work relating to the audit in an objective manner, even if the results and findings are not favourable to the holder of the authorisation;
- I have expertise in conducting environmental compliance audits, including knowledge of the Act and regulations that have relevance to the activity;
- I will adhere to and comply with all responsibilities as indicated in the National Environmental Management Act and Environmental Impact Assessment Regulations.
- I do not have and will not have any vested interest in the activity other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014.

Zoë Norval	Date:
	07 February 2025

### 3. LEGAL BACKGROUND AND BEST PRACTICES

This section provides an overview of the legislative requirements applicable to the project, including the acts, guidelines and policies considered in the compilation of the Closure Plan.

#### 3.1 THE CONSTITUTION OF SOUTH AFRICA, 1996 (ACT NO. 108 OF 1996)

The legislative motivation for this project is underpinned by The Constitution of South Africa, 1996 (Act No. 108 of 1996), which states that:

The State must, in compliance with Section 7(2) of the Constitution, respect, protect, promote and fulfil the rights enshrined in the Bill of Rights, which is the cornerstone of democracy in South Africa. Section 24 of the Constitution:

#### **24. Environment**

*-Everyone has the right-*

- (a) To an environment that is not harmful to their health or well-being; and*
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that-*
  - (i) Prevent pollution and ecological degradation;*
  - (ii) Promote conservation; and*
  - (iii) Secure ecologically sustainable development and use of natural resources while promoting a justifiable economic and social development.*

Section 24 of the Constitution of South Africa requires that all activities that may significantly affect the environment and require authorisation by law must be assessed prior to approval. In addition, it provides for the Minister of Environmental Affairs or the relevant provincial Ministers to identify:

- New activities that require approval;
- Areas within which activities require approval; and
- Existing activities that should be assessed and reported on.

Section 28(1) of the Constitution of South Africa states that:

*“Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring”.*

If such pollution or degradation cannot be prevented, then appropriate measures must be taken to minimise or rectify such pollution or degradation. These measures may include:

- Assessing the impact on the environment.
- Informing and educating employees about the environmental risks of their work and ways of minimising these risks;
- Ceasing, modifying or controlling actions which cause pollution/degradation;
- Containing pollutants or preventing movement of pollutants;
- Eliminating the source of pollution or degradation; and
- Remedying the effects of the pollution or degradation.

### 3.2 THE NATIONAL WATER ACT, 1998 (ACT NO. 36 OF 1998) [NWA]

The National Water Act, 1998 (Act No. 36 of 1998) (NWA) aims to provide management of the national water resources to achieve sustainable use of water for the benefit of all water users. This requires that the quality of water resources is protected as well as integrated management of water resources with the delegation of powers to institutions at the regional or catchment level. The purpose of the NWA is to ensure that the nation's water resources are protected, used, developed, conserved, managed and controlled in ways, which take into account:

- Meeting the basic human needs of present and future generations;
- Promoting equitable access to water;
- Redressing the results of past racial discrimination;
- Promoting the efficient, sustainable and beneficial use of water in the public interest;
- Facilitating social and economic development;
- Providing for growing demand for water use;
- Protecting aquatic and associated ecosystems and their biological diversity;
- Reducing and preventing pollution and degradation of water resources;
- Meeting international obligations; and
- Managing floods and droughts.

The following sections of the NWA, 1998 are relevant.

*Table 1: NWA, 1998 applicable sections*

AREA OF CONCERN	SECTION	LEGAL REQUIREMENTS
Prevention and remedying effects of pollution.	Section 19	<i>Any situation exists or which may cause or is likely to cause pollution of a water resource, must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring.</i>
Control of emergency incidents.	Section 20	<i>Incidences of pollution needs to be reported the Department and the relevant catchment agency</i>

AREA OF CONCERN	SECTION	LEGAL REQUIREMENTS
General principles: Water uses	Section 21	<i>The MR Holder has a valid General Authorisation issued by DWS in 2017.</i>

### 3.3 THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO 107 OF 1998) [NEMA]

The National Environmental Management Act (NEMA) strives to regulate national environmental management policy and is focussed primarily on co-operative governance, public participation and sustainable development. NEMA makes provisions for co-operative environmental governance by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state and to provide for matters connected therewith.

The following sections are relevant.

*Table 2: NEMA, 1998 applicable sections*

AREA OF CONCERN	SECTION	LEGAL REQUIREMENTS
Principles that may significantly affect the environment.	Section 28	<i>General duty of care on every person who causes, has caused or may cause significant pollution or degradation of the environment to take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.</i>
Control of emergency incidents.	Section 30	<i>Incidences of pollution needs to be reported the Department.</i>
Environmental Management Plan.	Section 34	<i>A draft EMP must include –  information on any proposed management or mitigation measures that will be taken to address the environmental impacts that have been identified in a report contemplated by these Regulations, including environmental impacts or objectives in respect of – (iv) rehabilitation of the environment;  as far as reasonably practicable, measures to rehabilitate the environment affected by the undertaking of any listed activity or specified activity to its natural or predetermined state or to a land use which conforms to the generally acceptable principle of sustainable development, including where appropriate, concurrent or progressive rehabilitation measures.</i>

### **3.4 THE NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008 (ACT NO 57 OF 2008) [NEM:WA]**

The rehabilitation measures must be aligned with the objections of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA) which includes:

- (a) To protect health, well-being and the environment by providing reasonable measures for—
  - (i) Minimising the consumption of natural resources;
  - (ii) Avoiding and minimising the generation of waste;
  - (iii) Reducing, re-using, recycling and recovering waste;
  - (iv) Treating and safely disposing of waste as a last resort;
  - (v) Preventing pollution and ecological degradation;
  - (vi) Securing ecologically sustainable development while promoting justifiable economic and social development;
  - (vii) Promoting and ensuring the effective delivery of waste services;
  - (viii) Remediating land where contamination presents, or may present, a significant risk of harm to health or the environment; and
  - (ix) Achieving integrated waste management reporting and planning;
- (b) To ensure that people are aware of the impact of waste on their health, well-being and the environment;
- (c) To provide for compliance with the measures; and
- (d) Generally, to give effect to Section 24 of the Constitution in order to secure an environment that is not harmful to health and well-being

#### **3.4.1 Waste Classification and Management Regulations, 2013 (GNR 634)**

Waste Classification and Management Regulations (WCMR) promulgated under the National Environmental Management: Waste Act, 2008 (NEM:WA) (effective 2013) provides mechanisms to:

- Facilitate the implementation of the waste hierarchy to move away from landfill;
- Reuse, recovery and treatment;
- Separate waste classification from the management of waste;
- Divert waste from landfill and into utilisation where possible; and
- Provide measures to monitor the progress

The Waste Classification and Management Regulations ultimately enables the improved and more efficient classification and management of waste; provide for safe and appropriate handling, storage, recovery, reuse, recycling, treatment and disposal of waste and will also enable accurate and relevant reporting on waste generation and management. All waste generators, excluding domestic generators, must ensure that the waste they generate is classified within 180 days of its generation.

All wastes that were classified in terms of the “Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste in terms of the Department of Water Affairs” (2nd Edition, 1998; Department of Water Affairs and Forestry) or alternative classifications that were approved prior to the WCMR taking effect, must be re-classified and assessed within three years from the commencement of these Regulations.

Reference is made to the NEM:WA, part 8 of Chapter 4 regarding contaminated land:

*All owners of land that is significantly contaminated become obliged to report that contamination is occurring. Part 8 of Chapter 4 is concerned with the remediation of contaminated land. This new legal regime for identifying contaminated land, determining its status and the risk that it poses, and regulating the remediation process is introduced. This law imposes significant legal obligation on the owners of land and on those who cause contamination, with potentially serious financial consequences. Part 8 applies where the pollution only manifest sometime after the contamination occurred and also where the action of a person (for example, the excavation of land pursuant to a development) results in a change to pre-existing contamination. Along with the notice bringing Part 8 into effect, norms and standards for the remediation of contaminated land and soil quality (list certain contaminants and specify soil screening values for human health and environmental protection). This act also has several important implications for the sale of and, sellers who know that their lands is contaminated can no longer keep silent and this is classified as an offence.*

## 4. ENVIRONMENTAL AND PROJECT CONTEXT

### 4.1 PROJECT LOCATION

The application was lodged over 11.7 ha on a disturbed area of the farm previously used for mining activities on a portion of Portion 1 of Farm Ruigtevley 97 KQ, Thabazimbi Local Municipality, Limpopo Province. The table below lists the GPS coordinates of the proposed stockpile footprint.

Table 3: GPS coordinates of the proposed footprint.

NUMBER	DEGREES, MINUTES, SECONDS	
	LAT (S)	LONG (E)
Corner 1	24°18'15,606"S	27°24'54,364"E
Corner 2	24°18'10,962"S	27°25'6,571"E
Corner 3	24°18'21,935"S	27°25'7,597"E
Corner 4	24°18'26,582"S	27°24'55,174"E
Corner 5	24°18'23,857"S	27°24'53,798"E
Corner 6	24°18'23,058"S	27°24'55,559"E
Corner 7	24°18'21,625"S	27°24'54,893"E



Figure 1: Satellite view showing the direction to the proposed stockpile area (green polygon)



## **4.2 PROPOSED OPERATION**

### **4.2.1 Site Establishment Phase**

Site establishment entails the demarcation of the stockpile area boundaries, clearance of vegetation, and stripping and stockpiling of topsoil.

#### **4.2.1.1 Demarcation Boundaries**

Pursuant to receipt of the Environmental Authorization (EA) and prior to site establishment, the boundaries of the approved area will be demarcated with visible beacons

#### **4.2.1.2 Access Road**

The Applicant intends to construct a dirt road spanning from the R510 to the designated stockpile area and extended as the activities progress and will be rehabilitated as part of the final reinstatement of the area. The access farm road turns right from the R510 road.

#### **4.2.1.3 Vegetation Clearing**

According to Mucina and Rutherford (2012) the stockpile area extends over a vegetation type known as the SVcb 16 Western Sandy Bushveld which is classified as Least Threatened. According to the Limpopo Conservation Plan, the area is classified as Ecological Support Area (ESA). To mitigate this, the clearing of vegetation must be contained to the approved footprint, and no vegetation/bush clearance, outside the approved area, may be allowed. Please see mitigation measures as described in Appendix M.

#### **4.2.1.4 Topsoil Stripping**

It is proposed that topsoil removal will be restricted to the exact footprint of areas required during the operational phase of the activity. The topsoil will be stockpiled at a designated signposted area within the boundary to be replaced during the rehabilitation of the area. It will be part of the obligations of site management to prevent the mixing of topsoil heaps with overburden/other soil heaps. The complete A-horizon (the top 100 – 200 mm of soil which is generally darker coloured due to high organic matter content) will be removed. If it is unclear where the topsoil layer ends the

top 300 mm of soil will be stripped. The topsoil berm will measure a maximum of 1.5 m in height in order to preserve micro-organisms within the topsoil, which can be lost due to compaction and lack of oxygen.

#### **4.2.1.5 Introduction of Machinery and Site Equipment**

The infrastructure to be used on site will all be of temporary and mobile nature. Containers will be used for office and storage purposes, and a weigh bridge will be established (temporary). The storage of fuel (if any) will be below the threshold of the NEMA EIA listed activities. The ablution facilities will be chemical toilets that will be serviced by registered suppliers. The office and storage containers, weigh bridge and ablution facilities will most likely be placed at the entrance to the site, while the crushing plant will be of mobile nature, moving around the site as needed.

Presently, the infrastructure/equipment is expected to consist of at least:

- A temporary wash bay;
- ADT trucks;
- Chemical ablution facilities;
- Containers used as site office, workshop, and storage room;
- Crushing and screening plant (mobile);
- Earthmoving- and excavating equipment;
- Weighbridge with control room;
- Generators; and a
- Water truck.

### **4.3 OPERATIONAL PHASE**

The Applicant submitted this application for environmental authorization in need for gravel/aggregate in the area due to the proposed R510 road construction project as well as the increase in building, construction and other road maintenance projects.

Aggregate will be transported from quarries within the vicinity of the area or from other commercial sites. The rock will then be delivered to the crushing and screening plant where it will be reduced to various sized gravels. The screened material will be delivered to various size category stockpiles. Transportation of the final product will be from the stockpile area to the end point by means of trucks.

Should this application be successful, the Applicant intends to:

1. demarcate the boundaries of the stockpile area;
2. strip the topsoil off the earmarked area and stockpile it for later use in rehabilitation;
3. stockpile the processed material in various size categories within the boundaries of the approved area;
4. process the material through crushing and screening;
5. load and transport the material from the stockpiles onto trucks that will transport it to clients.

### **4.4 TOPOGRAPHY**

The natural topography the proposed excavated area can be described as flats and undulating plains from Assen northwards past Thabazimbi and remaining west of the Waterberg Mountains towards Steenbokpan in the north. Some patches occur between the Crocodile and Marico Rivers to the west. The elevation loss from the nearest road to the other side of the hill of the proposed footprint to be 12.5 m over 579m.

### **4.5 AIR AND NOISE QUALITY**

The residential dwellings nearest to the proposed footprint is approximately 2 km away (north). Emission into the atmosphere is controlled by the National Environmental Management: Air Quality Act, 2004. The proposed activity does not trigger an application in terms of the said act. The proposed activity will contribute the emissions mechanical equipment to the receiving environment for the duration of the operational phase. Should the permit holder implement the mitigation measures proposed in this document and the

EMPR the impact on the air quality of the surrounding environment is deemed to be of low significance and compatible with the current land use.

The potential impact on the noise ambiance of the receiving environment is expected to be of low significance. The distance of the proposed

#### **4.6 GEOLOGY**

As mentioned earlier, the proposed project can be described as sandstone and mudstone of the Matlabas Subgroup and sandstone, subordinate conglomerate, siltstone and shale of the Kransberg Subgroup (both Mokolian Waterberg Group) are found in the north. Archaean granite and gneiss of the Swazian Erathem and granite of the Lebowa Granite Suite (Bushveld Igneous Complex) are found in the west and southeast of the area, respectively. Soils are plinthic catena, eutrophic, red-yellow apedal, freely drained, high base status, Hutton and Clovelly with some Glenrosa and Mispah soil forms. Several areas have less sandy soil than that of SVcb 12 Central Sandy Bushveld. Land types mainly Bd, Ah, Ae and Fa

#### **4.7 HYDROLOGY**

The proposed area falls within the A41A quaternary catchment which falls within the upper reaches of the Matlabas/Mokolo Sub Water Management Area that is situated in the LIMPOPO Water Management Area which is managed by the Department of Water and Sanitation (DWS). The proposed area is not located within 500m of any water resources. Any other water will be bought from a registered source and transported to site.

#### **4.8 CULTURAL AND HERITAGE ENVIRONMENT**

According to the Heritage Impact Assessment (Appendix D1), the Project area is largely disturbed through previous activities which can also be seen illustrated in historical maps from the 1980s onwards. The Project area does not have any hills or topographical focal points that would have attracted human settlement in antiquity and the previous mining activities would have impacted on heritage resources had any been present.

During the survey, foundation remains RV003 and RV004 were recorded and are likely related to mining infrastructure of the Project area. Both sites are of low significance and impact to both sites will be low. The features potential to contribute to aesthetic, historic, scientific, and social aspects are non-existent, and they are of no significance apart from mentioning them in this report.

The impact to heritage resources is expected to be low provided that the recommendations in HIA report are adhered to and based on the South African Heritage Resource Authority (SAHRA) 's approval.

#### **4.9 EXISTING INFRASTRUCTURE**

No other infrastructure has been established on the property that can be affected by the proposed development.

During the environmental impact assessment process, the feasibility of the proposed site was assessed to identify fatal flaws that are deemed as severe as to prevent the activity continuing or warrant a site or project alternative. The outcome of the assessment showed that should the mitigation measures and monitoring programmes proposed in this document be implemented, no fatal flaws could be identified that prevents the activity continuing.

#### **4.10 LAND CAPABILITY AND SURROUNDING LAND USE**

A portion of Portion 1 of Farm Ruigtevley 97 KQ, Thabazimbi Local Municipality, Limpopo Province, is situated in a rural setting. The current surrounding land uses can be classified as agricultural land, existing mining and tourism:

### **5. CLOSURE PLAN**

The following objectives are leading closure indicators, which need to be applied across all the domains, and read in conjunction with the principles, which embody the strategic objectives. The closure plan must address all the areas associated with closing the operations, of which rehabilitation and re-vegetation forms part of a component. The first step in developing the overall closure strategy is to identify potential post activity land use options and establish key objectives for closure to be incorporated in the project design.

The preferred post activity land use for the proposed stockpile area is to restore the natural vegetation (where possible). In this context, the primary objectives for the closure of the operations are:

- Remove all temporary infrastructure and waste from the stockpile area as per the requirements of the EMPR.
- Shape and contour disturbed areas in compliance with the EMPR.
- Ensure that permanent changes in topography are sustainable and do not cause erosion or the damming of surface water.

- Use the topsoil effectively to promote the re-establishment of vegetation.
- Ensure that all rehabilitated areas are stable and self-sustaining in terms of vegetation cover.
- Eradicate all weeds/invaser plant species by intensive management of the stockpile site.

## **5.1 DESIGN PRINCIPLES**

### **5.1.1 Topsoil removal**

Upon closure of the stockpile area, it will entail the reinstatement of the stockpile area by removing the stockpiled material, and site infrastructure/equipment and landscaping the disturbed footprints. If the vegetation cover is not reinstated within six months after closure, the area will be seeded with an appropriate grass mix.

The decommissioning activities will therefore consist of the following:

- Removing all stockpiled material;
- Removing all machinery and equipment from site;
- Landscaping all disturbed areas and replacing the topsoil;
- Vegetating the reinstated area; and
- Controlling/monitoring the invasive plant species.

The future land use of the proposed area will be agriculture. Upon replacement of the topsoil, the area will once again be available for grazing purposes, and the planting of the cover crop (upon request) will tie in with the proposed land use.

### **5.1.2 Plant, Office and Service Areas**

The office/processing area (including offices, workshop, storerooms, wash bay, ablution, parking area and crushing infrastructure) will be reinstated and the footprint landscaped as listed below.

- Stockpiles must be removed during the decommissioning phase, the area ripped, and the topsoil returned to its original depth to provide a growth medium.
- Photographs of the plant, office and service areas, before and during the operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of LEDET.
- On completion of operations, the surface of these areas, if compacted due to hauling and dumping operations, shall be scarified to a depth of at least 200 mm and graded to an even surface condition. Where applicable/possible topsoil needs to be returned to its original depth over the area.
- The area shall then be fertilized if necessary to allow vegetation to establish rapidly. The site shall be seeded (if needed) with a local, adapted indigenous seed mix.

## **5.2 POST-ACTIVITIES LAND USE**

As mentioned earlier, the preferred post activity land use for the proposed stockpile area, is to restore the natural vegetation (where possible) and return the area to its previous state.

## **5.3 CLOSURE ACTIONS**

The closure goals and objectives are to ensure that post-use rehabilitation achieves a stable and functioning landform consistent with the surrounding landscape, other environmental values and agreed land use.

The applicant will comply with the minimum closure objectives as prescribed by LEDET and detailed below:

### **5.3.1 Rehabilitation of Stockpile area**

- Stockpiles must be removed during the decommissioning phase, the area ripped and the topsoil returned to its original depth to provide a growth medium.
- Photographs of the plant, office and service areas, before and during the operation and after rehabilitation, shall be taken at selected fixed points and kept on record for the information of LEDET.

- On completion of operations, the surface of these areas, if compacted due to hauling and dumping operations, shall be scarified to a depth of at least 200 mm and graded to an even surface condition.
- Topsoil needs to be returned to its original depth over the area.

### **5.3.2 Final rehabilitation:**

- Rehabilitation of the surface area shall entail land preparation, seeding (if required), maintenance, and clearing of invasive plant species.
- All equipment, plant, and other items used during the EA period must be removed from the site.
- Waste material of any description, including receptacles, scrap, rubble and tyres, must be removed entirely from the area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site.
- The management of invasive plant species must be done in a sporadic manner during the life of the stockpile activities. Species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto) need to be eradicated from the site.

### **5.3.3 Revegetation of Rehabilitated Areas**

If necessary, the area can be fertilized to hasten the establishment of flora. Should the site's natural vegetation not grow back within six months of its closure to spread the naturally existent flora in the area, the site could be seeded with a local or adapted indigenous seed mix. This area is seen to have low agricultural potential due to the rocky surface therefore the use of seed mixes should only be done after consultation with a qualified specialist with experience in the area as it might not apply. The use of a commercial seed mix is recommended, and for dryland areas, the seed mix should be less than half the standard sowing rate and include annuals and perennials.

### **5.3.4 Maintenance and Monitoring**

Rehabilitated areas need to be monitored and managed after the initial rehabilitation. The proposed stockpile area's primary tool for maintenance of the rehabilitated area will be monitoring of the reinstated areas until the closure certificate is issued. If areas are identified that are considered unsatisfactory then maintenance may include, but not be limited to:



- Replanting failed or unsatisfactory areas;
- Repairing any erosion problems; and
- Pest and weed control.

### **5.3.5 Success Criteria and Monitoring**

To assess when the rehabilitation and re-vegetation process is complete, the EA holder will develop a set of completion criteria. These criteria will be reviewed by senior management before being submitted to the regulatory authorities (LEDET) for approval and sign off.

The approved set of completion criteria will be used as a basis for assessing the closure of the stockpile operations, with the EA holder required to comply with the specified criteria before the land management can be relinquished. The completion criteria will be reviewed every two years with the closure plan and updated to include findings of the rehabilitation research and development program as well as additional requirements of the regulatory authorities.

When selecting completion criteria, consideration must be given to the climatic conditions in the area. Using simple percentage species and percentage cover may not be appropriate, as this is dependent on when the samples are taken. If the baseline was established during a wet year and the assessment undertaken during drought, the criteria will not be met. The rehabilitated and re-vegetated areas will be monitored to determine the progress of the programme. Monitoring is likely to be a combination of methods and may include photographic monitoring, transects and standard plot areas.

### **5.3.6 Impact Specific Procedures**

The table below provides a summary of the impact specific procedures associated with the closure.

Table 4: Summary of the impact specific procedures

CLOSURE MANAGEMENT OBJECTIVES	SPECIFIC PERFORMANCE CRITERIA	ACTION REQUIRED
<b>SOCIO-ECONOMIC</b>		
<ul style="list-style-type: none"> <li>■ The retrenchment process will be followed as per requirements of the applicable legal process; and</li> <li>■ All existing social investments will be phased out over an agreed period with beneficiaries.</li> </ul>	<ul style="list-style-type: none"> <li>■ Progressive rehabilitation must be implemented if possible.</li> </ul>	<ul style="list-style-type: none"> <li>■ Any commitments made to I&amp;AP'S will be attended to the relevant I&amp;AP's satisfaction as agreed upon between the I&amp;AP'S and the mine.</li> </ul>
<b>TOPOGRAPHY AND EROSION CONTROL</b>		
<ul style="list-style-type: none"> <li>■ The area will have contours constructed to prevent soil erosion.</li> </ul>	<ul style="list-style-type: none"> <li>■ All slopes which may incur erosion will be profiled in such a way that a preferential down drain can be installed;</li> </ul>	<ul style="list-style-type: none"> <li>■ Should it be noted that designs are not being followed, rehabilitation activities will cease and corrective measures will be taken to ensure design specifications are achieved. Specialists will be consulted if necessary;</li> <li>■ Any pooling will be addressed by filling depression and / or grading areas and re-vegetating such sites;</li> <li>■ Any eroded soils will be lifted and returned to the affected area;</li> <li>■ Any compacted soils will be ripped or disked and re-vegetated with indigenous flora. Vegetation will then be monitored in these areas;</li> <li>■ All recommendations made by the specialists will be implemented where deemed appropriate;</li> <li>■ An alien invasive management program will be implemented for the control and eradication of alien invasive species on site. This plan will give preference to mechanical control methods. Any chemicals utilised will be used responsibly. Where required DWS will be consulted with regards to the use of certain chemicals</li> </ul>
<b>ECOLOGY</b>		
<ul style="list-style-type: none"> <li>■ The rehabilitated area will be protected from surface disturbance to allow vegetation to establish and stabilise.</li> </ul>	<ul style="list-style-type: none"> <li>■ Vegetation in rehabilitated areas will have equivalent values as surrounding natural ecosystems;</li> </ul>	<ul style="list-style-type: none"> <li>■ Should it be noted that designs are not being followed, rehabilitation activities will be amended to ensure</li> </ul>

CLOSURE MANAGEMENT OBJECTIVES	SPECIFIC PERFORMANCE CRITERIA	ACTION REQUIRED
	<ul style="list-style-type: none"> <li>■ The rehabilitated ecosystem will have equivalent functions and resilience as the target ecosystem;</li> <li>■ Soil properties will be appropriate to support the target ecosystem;</li> <li>■ The rehabilitated areas will provide appropriate habitat for fauna.</li> </ul>	<p>corrective measures will be taken to ensure design specifications are achieved. Specialists will be consulted if necessary;</p> <ul style="list-style-type: none"> <li>■ An alien invasive management programme will be implemented for the control and eradication of alien invasive species on site. This plan will give preference to mechanical control methods. Any chemicals utilised must be used responsibly.</li> </ul>
<b>LAND USE</b>		
<ul style="list-style-type: none"> <li>■ To ensure that rehabilitation is done to such an extent that land use potential is regained for agricultural use and associated zoning.</li> </ul>	<ul style="list-style-type: none"> <li>■ Only after the levelled areas have been inspected and approved by the Site Manager will topsoil be placed to a depth of 0.3 m. The topsoil layer must be as even as possible, i.e. it must be smooth, and the depth must remain consistent throughout;</li> <li>■ Once the topsoil has been replaced, vehicle movement will be restricted to prevent compaction of the topsoil;</li> <li>■ Rehabilitated areas will be re-vegetated with local indigenous flora as far as possible,</li> </ul>	<ul style="list-style-type: none"> <li>■ N/A</li> </ul>

## 5.4 CLOSURE SCHEDULE

At this stage it is proposed that the final rehabilitation of the stockpile area will take approximately one month to complete. Control of invasive plant species is an important aspect after topsoil replacement. Site management will implement an invasive plant species management plan during the 12-month aftercare period to address germination of problem plants in the area.

Table 5: Closure schedule

<b>CLOSURE SCHEDULE</b>	
<b>DECOMMISSIONING / CLOSURE ACTION</b>	<b>TIMEFRAME</b>
<b>PLANT, OFFICE AND SERVICE AREAS</b>	
<ul style="list-style-type: none"> <li>➤ Remove all product stockpiles;</li> <li>➤ Remove all temporary structures/equipment from the footprint;</li> <li>➤ Rip any compacted area;</li> <li>➤ Landscape and level the area to prevent any depressions and allow for agricultural activities;</li> <li>➤ Replace the stockpiled topsoil over the area;</li> </ul>	Week 1 - 6
<b>MAINTENANCE AND AFTER CARE</b>	
<ul style="list-style-type: none"> <li>➤ Erosion Monitoring</li> <li>➤ Weeds and Invader Plant Control</li> </ul>	12 months duration after final closure of the stockpile area

## **5.5 IMPLEMENTATION AND RESPONSIBILITY OF CLOSURE PLAN**

Implementation of the closure plan is ultimately the responsibility of Inzalo Crushing and Aggregates (Pty) Ltd. Upon commencement of the closure phase daily compliance monitoring will be the responsibility of the site manager. The site manager will be responsible for ensuring compliance with the guidelines as stipulated in the EMPR as well as the prevention and/or rectification of environmental incidents. The EA holder will appoint an Environmental Control Officer to oversee compliance of the rehabilitation/closure activities.

### **5.5.1 Site Management Responsibility List**

- Inspect area for erosion, pooling and/or compaction;
- Monitor any ecologically sensitive species should it be observed on site.

### **5.5.2 Management of Information and Data**

The Closure Plan must include a description of the management strategies, and all information and data relevant to closures. These records are valuable during all phases of operations to provide:

- A history of closure and implementation at the site;
- A history of past developments;
- Information for incorporation into state and national natural resource databases;  
and
- The potential for improved future land use planning and/or site development.

## **5.6 IDENTIFIED GAPS IN THE PLAN**

The assumptions made in this plan, which relate to the closure objectives and associated impact on the receiving environment, stem from site-specific information gathered by the project team. No gaps in the Closure Plan could be identified.

## **5.7 RELINQUISHMENT CRITERIA FOR CLOSURE ACTIVITIES**

The specific rehabilitation outcomes against which the effectiveness of completed rehabilitation must be measured are:

1. that the topography has been sufficiently rehabilitated without unsafe excavation edges;
2. that topsoil has been spread on the surface;
3. that there is a potential rooting depth of at least 30 cm, of non-compacted soil material, which is suitable for root growth, across the stockpile area;

4. that there is no visible erosion across the area, or down-slope of it as a result of mining, and that no part of the area has been left unacceptably vulnerable to erosion;
5. that a successful cover crop has been established across the area.

In addition to the above, the following relinquishment criteria is proposed for the closure activities of the stockpile area:

*Table 6: Relinquishment criteria*

<b>RELINQUISHMENT CRITERIA FOR CLOSURE ACTIVITIES</b>			
<b>CATEGORY</b>	<b>RELINQUISHMENT CRITERIA</b>	<b>INDICATORS</b>	<b>REPORTING REQUIREMENTS</b>
Removal of all equipment.	No visible man-made structures should remain.	Closeout inspection by site management upon end of decommissioning phase.	Photographic evidence that infrastructure has been removed.
Soil erosion	Implementation of erosion control measures or the establishment of vegetation in denuded areas.	Engineered structures to control water flow	Proof in final closure report that required structures are in place and functional.
Vegetation	If the natural vegetation does not grow back within 6 months, then seeding of a cover crop after topsoiling is required.	Biodiversity monitoring	Monitoring report
Invader plant management	Continuous management of invader plants until the establishment of the first cover crop.	Biodiversity monitoring	Monitoring report
Land Use	Land capability and productivity similar to that, which existed prior to mining.	Land capability and productivity	Comparison to equivalent areas.

## **6. MONITORING, AUDITING AND REPORTING**

In compliance with applicable legislation, the EA holder will conduct monitoring of the stockpile activities for the duration of the decommissioning and closure phase. The compliance of the site will be audited and reporting will be done to the relevant authorities. The table below stipulates the actions to be followed in this regard. Monitoring, auditing and reporting needs to be conducted until closure has been approved by the LEDET.

Table 7: Monitoring, auditing and reporting requirements

<b>MONITORING, AUDITING AND REPORTING REQUIREMENTS</b>			
<b>AUDIT</b>	<b>RESPONSIBLE PERSON</b>	<b>FREQUENCY OF AUDIT</b>	<b>CLOSE OUT APPROACH</b>
<b>LEGISLATED AUDITING AND REPORTING</b>			
<b>Environmental Auditing</b>	<b><u>Internal Review</u></b>		
	Site manager to ensure compliance with Environmental Management Programme and Closure Plan.	Daily compliance monitoring.	Any non-conformance must immediately be addressed by site management and weekly reported on.
	<b><u>External Auditing</u></b>		
	External Environmental Consultant	Annual auditing and reporting to the competent authority.	Depending on the significance of the findings, site management has a maximum of four weeks to address and close out auditing results.
<b>MONITORING</b>			
<b>Dust Monitoring</b>	Site Management	Daily Dust Monitoring	Site management has a maximum of two weeks to develop and implement a dust management plan should the dust levels increase, and such a plan is required by LEDET or the municipality.
<b>Invader Plant Monitoring</b>	Site Management	Annual Monitoring	Site management has a maximum of two weeks to review and implement the invader plant control plan should Category 1a & b plants in terms of the National Environmental Management: Biodiversity Act, 2004 (Act 15 of 1973) and the Alien and Invasive Species Regulations, 2014 (amended 2016) germinate on-site.

## 6.1 SCHEDULE FOR REPORTING REQUIREMENTS

The following table stipulates the reporting requirements and how document updating will be handled:

Table 8: Reporting requirements

<b>REPORTING REQUIREMENTS</b>			
<b>AUDIT</b>	<b>LEGISLATION</b>	<b>REPORTING REQUIREMENTS</b>	<b>UPDATE DISCLOSURE</b>
<b>Environmental Auditing</b>	NEMA; EIA Regulations, 2014	Reporting on the environmental compliance of the stockpile area will be in accordance with Regulation 34 of the NEMA EIA Regulations, 2014. The environmental audit report will contain the information set out in Appendix 7 of the said Regulation.	The environmental audit report will indicate the ability of the EMPR and Closure Plan to adequately manage the activity. Should the reports not be sufficient, amendment will be proposed.



## 7. ENVIRONMENTAL RISK ASSESSMENT REPORT

The objective of the environmental risk assessment report is to:

- a) ensure timeous risk reduction through appropriate interventions;
- b) identify and quantify the potential latent environmental risks related to post closure;
- c) detail the approach to managing the risks;
- d) quantify the potential liabilities associated with the management of the risks; and
- e) outline monitoring, auditing and reporting requirements.

### 7.1 ASSESSMENT PROCESS USED TO IDENTIFY AND QUANTIFY LATENT RISKS

#### 7.1.1 Methodology

The methodology for the assessment of the potential latent risks entailed the use of the following:

#### **DEFINITIONS AND CONCEPTS**

##### **Environmental significance:**

The concept of significance is at the core of impact identification, evaluation and decision-making. The concept remains largely undefined and there is no international consensus on a single definition. The following common elements are recognised from the various interpretations:

- Environmental significance is a value judgement
- The degree of environmental significance depends on the nature of the risk
- The importance is rated in terms of both biophysical and socio-economic values
- Determining significance involves the amount of change to the environment perceived to be acceptable to affected communities.

Significance can be differentiated into risk magnitude and risk significance. Risk magnitude is the measurable change (i.e. intensity, duration and likelihood). Risk significance is the value placed on the change by different affected parties (i.e. level of acceptability)

The concept of risk has two dimensions, namely the consequence of an event or set of circumstances, and the likelihood of particular consequences being realised (Environment Australia (1999) Environmental Risk Management).

##### **Impact:**

The positive or negative effects on human well-being and / or the environment.

**Consequence:**

The intermediate or final outcome of an event or situation OR it is the result, on the environment, of an event.

**Likelihood:**

A qualitative term covering both probability and frequency.

**Frequency:**

The number of occurrences of a defined event in a given time or rate.

**Probability:**

The likelihood of a specific outcome measured by the ratio of a specific outcome to the total number of possible outcomes.

**Environment:**

Surroundings in which an organisation operates, including air, water, land, natural resources, flora, fauna, humans and their interrelation (ISO 14004, 1996).

**Methodology to be used:**

The environmental significance assessment methodology is based on the following determination:

**Environmental Significance = Overall Consequence x Overall Likelihood**

**Determination of Overall Consequence:**

Consequence analysis is a mixture of quantitative and qualitative information and the outcome can be positive or negative. Several factors can be used to determine consequence. For determining the environmental significance in terms of consequence, the following factors were chosen: Severity/Intensity, Duration and Extent/Spatial Scale. Each factor is assigned a rating of 1 to 5, as described in the tables below.

***Determination of Severity / Intensity:***

Severity relates to the nature of the event, aspect or impact to the environment and describes how severe the aspects affects the biophysical and socio-economic environment.

The following table will be used to obtain an overall rating for severity, taking into consideration the various criteria.

Table 9: Monitoring Programmes

Type of criteria	Rating				
	1	2	3	4	5
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%
Qualitative	Insignificant / Non-harmful	Small / Potentially harmful	Significant/ Harmful	Great/ Very harmful	Disastrous Extremely harmful
Social/ Community response	Acceptable / I&AP satisfied	Slightly tolerable / Possible objections	Intolerable/ Sporadic complaints	Unacceptable / Widespread complaints	Totally unacceptable / Possible legal action
Irreversibility	Very low cost to mitigate/ High potential to mitigate impacts to level of insignificance/ Easily reversible	Low cost to mitigate	Substantial cost to mitigate/ Potential to mitigate impacts/ Potential to reverse impact	High cost to mitigate	Prohibitive cost to mitigate/ Little or no mechanism to mitigate impact Irreversible
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change / deterioration or disturbance	Moderate change / deterioration or disturbance	Significant change / deterioration or disturbance	Very significant change / deterioration or disturbance	Disastrous change / deterioration or disturbance

**Determination of Duration**

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

*Table 10: Rating of duration used in the assessment of potential latent risks*

Rating	Description
1	Up to ONE MONTH
2	ONE MONTH to THREE MONTHS (QUARTER)
3	THREE MONTHS to ONE YEAR
4	ONE to TEN YEARS
5	Beyond TEN YEARS

**Determination of Extent/Spatial Scale**

Extent or spatial scale is the area affected by the event, aspect or impact.

*Table 11: Rating of extent / spatial scale used in the assessment of potential latent risks*

Rating	Description
1	Immediate, fully contained area
2	Surrounding area
3	Within Business Unit area of responsibility
4	Within the farm/neighboring farm area
5	Regional, National, International

**Determination of Overall Consequence**

Overall consequence is determined by adding the factors determined above and summarized below, and then dividing the sum by 3.

*Table 12: Example of calculating overall consequence in the assessment of potential latent risks*

Consequence	Rating
Severity	Example 4
Duration	Example 2

Consequence	Rating
Extent	Example 4
<b>SUBTOTAL</b>	<b>10</b>
<b>TOTAL CONSEQUENCE:</b> (Subtotal divided by 3)	<b>3.3</b>

***Determination of Likelihood:***

The determination of likelihood is a combination of Frequency and Probability. Each factor is assigned a rating of 1 to 5, as described below and in tables 6 and 7.

***Determination of Frequency***

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

*Table 13: Rating of frequency used in the assessment of potential latent risks*

Rating	Description
1	Once a year or once/more during operation
2	Once/more in 6 Months
3	Once/more a Month
4	Once/more a Week
5	Daily

***Determination of Probability***

Probability refers to how often the activity or aspect has an impact on the environment.

*Table 14: Rating of probability used in the assessment of potential latent risks*

Rating	Description
1	Almost never / almost impossible
2	Very seldom / highly unlikely
3	Infrequent / unlikely / seldom
4	Often / regularly / likely / possible

Rating	Description
5	Daily / highly likely / definitely

### **Overall Likelihood**

Overall likelihood is calculated by adding the factors determined above and summarised below, and then dividing the sum by 2.

*Table 15: Example of calculating overall likelihood in the assessment of potential latent risks*

Consequence	Rating
Frequency	Example 4
Probability	Example 2
<b>SUBTOTAL</b>	<b>6</b>
<b>TOTAL LIKELIHOOD</b> (Subtotal divided by 2)	<b>3</b>

### **Determination of Overall Environmental Significance:**

The multiplication of overall consequence with overall likelihood will provide the significance of the risk, which is a number that will then fall into a range of **insignificant risk**, **uncertain risk** or **Significant Risk**, as shown in the table below.

*Table 16: Determination of overall significance in the assessment of potential latent risks*

Significance or Risk	Insignificant risk (cc)	Uncertain risk (bb)	Potential significant risk (aa)
Overall Consequence X Overall Likelihood	1 - 4.9	5 - 9.9	10 – 19.9

### **Qualitative description or magnitude of Environmental Significance**

This description is qualitative and is an indication of the nature or magnitude of the Environmental Significance. It also guides the prioritisations and decision-making process associated with this event, aspect or impact.

Table 17: Description of environmental significance and related action required in the assessment of potential latent risks

Significance	An insignificant risk (cc)	A uncertain risk (bb)	A potential significant risk (aa)
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect.  Acceptable.	Impact is of low order and therefore likely to have little real effect.  Acceptable.	Impact is real and substantial in relation to other impacts. Pose a risk to the company.  Unacceptable
Action Required	Maintain current management measures.  Where possible improve.	Maintain current management measures.  Implement monitoring and evaluate to determine potential increase in risk.  Where possible improve	Improve management measures to reduce risk.

Based on the above, the significance rating scale has been determined as follows:

- A potential Risk (aa) Risks of a substantial order. Mitigation and / or remedial activity would be feasible but difficult, expensive, time-consuming or some combination of these.
- An uncertain risk (bb) Risk would be negligible. Almost no mitigation and or remedial activity would be needed, and any minor steps, which might be needed, would be easy, cheap and simple.
- An insignificant risk (cc) There would be very small to no risk.

### 7.1.2 Description of Latent Risks

At this stage, no latent risks that will potentially arise during closure phase of the stockpile area were identified.

### 7.1.3 Results and Finding of Risk Assessment

Not applicable as no latent risks were identified.



#### 7.1.4 Changes to the Risk Assessment Results

N/A

#### 7.2 MANAGEMENT ACTIVITIES

No additional management activities are necessary as no latent risks were identified.

#### 7.3 COST ESTIMATE

Not applicable as no latent risks were identified.

#### 7.4 MONITORING, AUDITING AND REPORTING REQUIREMENTS



By reason of the fact that no latent risks with regard to the management of the stockpile area were identified, no additional monitoring, auditing or reporting requirements are required at this stage.

### 8. CONCLUSION

This Closure Plan needs to be followed together with the EMPR and its amendments when it is decided that the end of operations has been reached. This document gives the necessary information when planning the rehabilitation of the stockpile area together with the cost associated with the rehabilitation.

Inzalo Crushing and Aggregates (Pty) Ltd pledges to provide all necessary resources to guarantee that the rehabilitation of the stockpile area is carried out in a manner that will be deemed acceptable by all parties.

### 9. SIGNATURE OF AUTHOR

NAME	SIGNATURE	DATE
Zoë Norval		07 February 2025
Sonette Smit		10 February 2025

**10. UNDERTAKING BY PERMIT HOLDER**

I, .....Christiaan Weideman....., the undersigned and duly authorised thereto by ..... that Inzalo Crushing and Aggregates Pty) Ltd will comply with the provisions of NEMA.

I have studied and understand the contents of this document and duly undertake to adhere to the conditions as set out therein, unless specifically or otherwise agreed to in writing.

Signed at .....Pomana..... on this ...11<sup>th</sup>...day of ...February .....2025...



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Name: Christiaan Weideman

Designation:

## 11. REFERENCES

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