mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

ENVIRONMENTAL IMPACT ASSESSMENT REPORT

AND

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

SUBMITTED FOR ENVIRONMENTAL AUTHORIZATIONS IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 AND THE NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT, 2008 IN RESPECT OF LISTED ACTIVITIES THAT HAVE BEEN TRIGGERED BY APPLICATIONS IN TERMS OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (MPRDA)(AS AMENDED)

NAME OF APPLICANT:	**MAKESHIFT 1182 (PTY) LTD**
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FILE REFERENCE NUMBER SAMRAD:	LP 30/5/1/1/2/11847 PR

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1. IMPORTANT NOTICE

In terms of the Mineral and Petroleum resources development Act (Act 28 of 2002 as amended), the Minister must grant a prospecting or mining right if among others the mining "will not result in unacceptable pollution, ecological degradation or damage to the environment".

Unless an Environmental Authorization can be granted following the evaluation of an environmental Impact Assessment and an Environmental Management Programme report in terms of the National Environmental management Act (act 107 of 1998) (NEMA), it cannot be concluded that the said activities will not result in unacceptable pollution, ecological degradation or damage to the environment.

In terms of section 16(3)(b) of the EIA regulations, 2014, any report submitted as part of an application must be prepared in a format that may be determined by the Competent Authority and in terms of section 17 (1) (c) the competent Authority must check whether the application has taken into account any minimum requirements applicable or instructions or guidance provided by the competent authority to the submission of applications.

It is therefore an instruction that the proscribed reports required in respect of applications for an environmental authorization for listed activities triggered by an application for a right or a permit are submitted in the exact format of, and provide all the information required in terms of, this template. Furthermore please be advised that failure to submit the information required in the format provided in this template will be regarded as a failure to meet the requirements of the Regulation and will lead to the Environmental Authorization being refused.

It is furthermore an instruction that the Environmental Assessment Practitioner must process and interpret his/her research and analysis and use the findings thereof to compile the information required herein. (Unprocessed supporting information may be attached as appendices). The EAP must ensure the t the information required is placed correctly in the relevant sections of the report, in order, and under the provided headings as set out below, and ensure that the report is not cluttered with un-interpreted information and that it unambiguously represents the interpretation of the applicant.

2. OBJECTIVE OF THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

The Objective of the environment impact assessment process is to, through a consultative process-

(a) determine the policy and legislative context within which the activity is located and document how the proposed activity complies with and responds to the policy and legislative context;

(b) describe the needs and desirability of the proposed activity, including the need and desirability of the activity in the context of the preferred location;

(c) identify the location of the development footprint within the preferred site based on an impact and risk assessment process inclusive of cumulative impacts and a ranking process of all the identified development footprint alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects of the environment;

(d) determine the –
   (i) nature, significance, consequence, extent, duration and probability of the impacts occurring to inform identified preferred alternatives; and
   (ii) degree to which these impacts –
      (aa) can be reversed;
      (bb) may cause irreplaceable loss of resources, and
      (cc) can be avoided, managed or mitigated;

(e) identify the most ideal location for the activity within the preferred site based on the lowest level of environmental sensitivity identified during the assessment;

(f) identify, assess, and rank the impacts the activity will impose on the preferred location through the life of the activity;

(g) identify suitable measures to manage, avoid or mitigate identified impacts; and

(h) identify residual risks that need to be managed and monitored.

CONSULTANT DISCLAIMER: LW Consultants were only contracted to conduct the Environmental Impact Assessment and write the Revised Environmental Impact Assessment / Environmental Management Plan Report for this specific project. Due to the nature of the project LW Consultants requested the aid of FGA Geology and Mining for the conduction and drafting of this document. All recommendations and assumptions are based on the knowledge of the Environmental Assessment Practitioners and current Approved Environmental Impact Assessment / Environmental Management Plan Report in regard to the environment and project.

PART A

SCOPE OF ASSESSMENT AND ENVIRONMENTAL IMPACT ASSESSMENT REPORT

1. Contact Person and correspondence address.
   a) Details of
      i) Details of the EAP

Name of the Practitioner:	Lindie Wiehahn
IAIAsa Registration:	Lindie Wiehahn 5537
Tel no:	072 141 4164
Fax No:	086 606 6315
e-mail address:	lindie@liwico.co.za

      ii) Expertise of the EAP
         (1) The qualifications of the EAP
         (With evidence)

Current qualifications in this field were obtained through short courses at the University of Potchefstroom, which is the following:

- Introduction to Environmental Management (2002)
- Environmental Impact Assessment (2002)
- The Legal Framework for Managing Water in South Africa (2002)

         (2) Summary of the EAP's past experience.
         (In carrying out the Environmental Impact Assessment procedure)

During the year 2002 Lindie assisted with two Environmental Impact Assessments for a Golf Course development in Modder Rivier (today known as the Magersfontein Memorial Golf Course) and a Cottage development on the farm Avoca in the Douglas district. Later the same year she successfully completed her first sole Environmental Impact Assessment for the development of a filling station on the N12 at Warrenton.

Lindie was employed since then as an Environmental Consultant. Experiences obtained during these years were the drafting of Environmental Management Programmes, Environmental Management Programme Reports, Environmental Monitoring and Compliance Reports and Environmental Risk Reports. She also conducted several Environmental Impact Assessments for Mining Rights on La Reysstryd 53 IO, Lichtenburg (2004), Longlands, Barkly West (2004) and Lohatlha 673, Postmasburg (2009, 2011).

After the liquidation of Geo-Rock International, Lindie went into partnership with John H.R Loots till 2015. During these years she continued working as an Environmental Consultants and successfully an Environmental Impact Assessement on the farm Groot Derm 10, Alexanderbay (2012). From the year 2015 till date she undergone company name changes and is now consulting under LW Consultants.

Successful projects under the new DMR and NEMA regulations:

- EIA/EMPr Mining Right Roodepan 70 (2015)
- BEAR/EMPr Prospecting Right Bergplaats 502 (2016)
- BEAR/EMPr Mine Permit Longlands 350 (2016)
- EIA/EMPr Mining Right Nootgedacht 66 (2017)
- BEAR/EMPr Mine Permit Rooifontein 1722 (2017)
- BEAR/EMPR Mine Permit Du Toitspan 119 (2018)
- Rehabilitation NWA Vaal River Schmidtsdrift 248 (2018)
- BEAR/EMPR Mine Permit Middenspruit 151 (2018)
- BEAR/EMPR Mine Permit Boschpoort 558 (2018)

Successful projects abroad under their specified regulation:

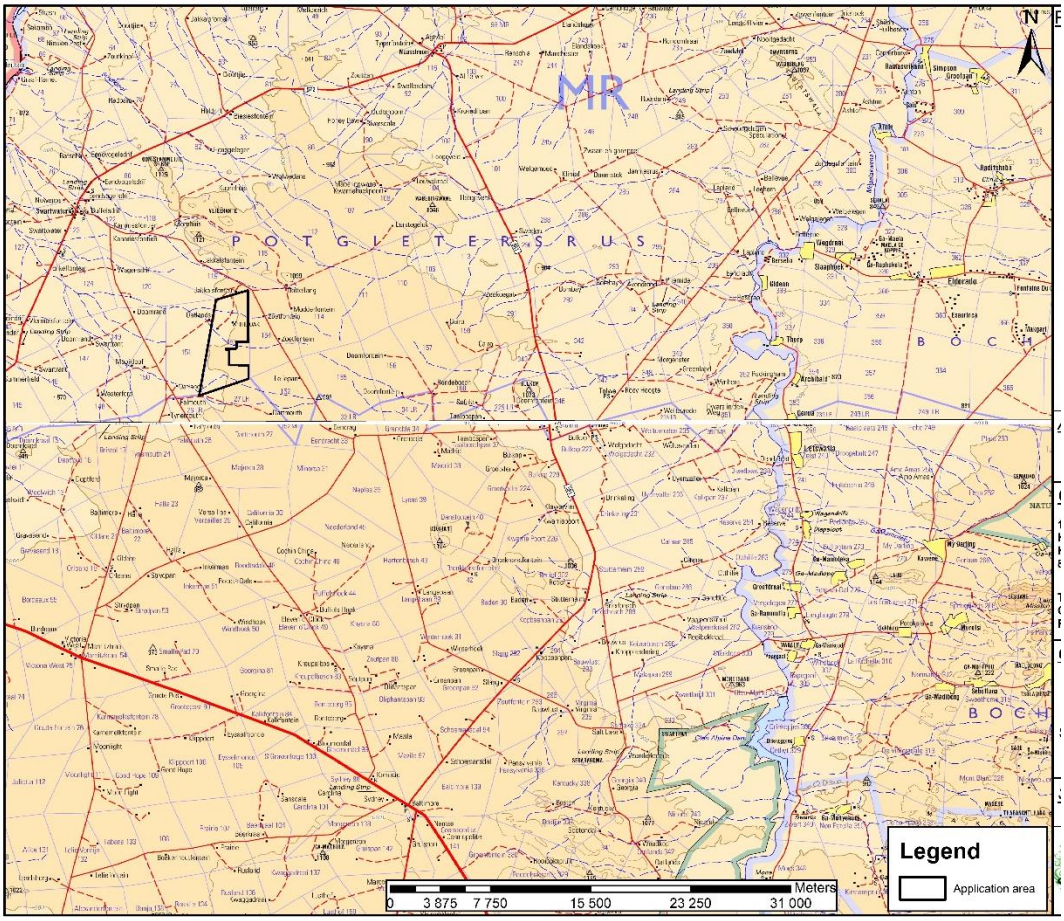
- EIA/EMPr Mining Chimanimani, Zimbabwe (2018)

b) Description of the property

Farm Name:	A Portion of the farm The Oaks 153 MR
Application area (Ha)	1 733.0312 ha (One thousand seven hundred and thirty three comma zero three one two hectares
Magisterial district:	Lephalale
Distance and direction from nearest town	The project area is situated near the Botswana border between Groblersbrug (63.4 km west south-west) and Maasstroon (49.5 km north-east) with the nearest town being Swartwater (20 km north north-west) and the nearest major town being Polokwane (190 km south south-east)
21 digit Survey General Code for each farm portion:	T0MR000000000153000000

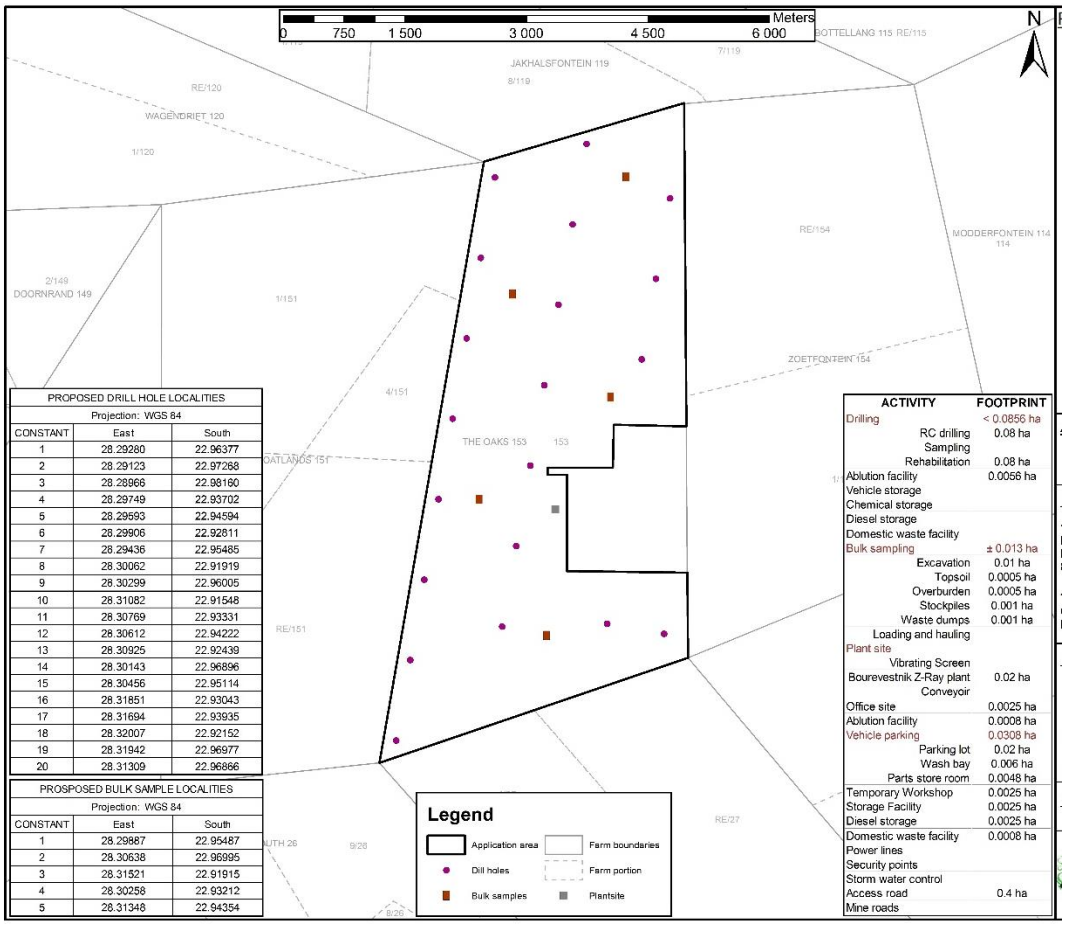
c) Locality map

(Show nearest town, scale not smaller than 1: 250 000)



d) Description of the scope of the proposed overall activity.

Provide a plan drawn to scale acceptable to the competent authority but not less than 1:10 000 that shows the location, and area (hectares) of all the aforesaid main and listed activities, and infrastructure to be placed on site.



PROPOSED DRILL HOLE LOCALITIES
Projection: WGS 84

CONSTANT	East	South
1	28.29280	22.96377
2	28.29123	22.97268
3	28.28966	22.98160
4	28.29749	22.93702
5	28.29593	22.94594
6	28.29906	22.92811
7	28.29436	22.95485
8	28.30062	22.91919
9	28.30299	22.96005
10	28.31082	22.91548
11	28.30769	22.93331
12	28.30612	22.94222
13	28.30925	22.92439
14	28.30143	22.96896
15	28.30456	22.95114
16	28.31851	22.93043
17	28.31694	22.93935
18	28.32007	22.92152
19	28.31942	22.96977
20	28.31309	22.96866

PROSPOSED BULK SAMPLE LOCALITIES
Projection: WGS 84

CONSTANT	East	South
1	28.29887	22.95487
2	28.30638	22.96995
3	28.31521	22.91915
4	28.30258	22.93212
5	28.31348	22.94354

ACTIVITY	FOOTPRINT
Drilling	< 0.0856 ha
RC drilling	0.08 ha
Sampling	
Rehabilitation	0.08 ha
Ablution facility	0.0056 ha
Vehicle storage	
Chemical storage	
Diesel storage	
Domestic waste facility	
Bulk sampling	± 0.013 ha
Excavation	0.01 ha
Topsoil	0.0005 ha
Overburden	0.0005 ha
Stockpiles	0.001 ha
Waste dumps	0.001 ha
Loading and hauling	
Plant site	
Vibrating Screen	
Bourevestnik Z-Ray plant	0.02 ha
Conveyoir	
Office site	0.0025 ha
Ablution facility	0.0008 ha
Vehicle parking	0.0308 ha
Parking lot	0.02 ha
Wash bay	0.006 ha
Parts store room	0.0048 ha
Temporary Workshop	0.0025 ha
Storage Facility	0.0025 ha
Diesel storage	0.0025 ha
Domestic waste facility	0.0008 ha
Power lines	
Security points	
Storm water control	
Access road	0.4 ha
Mine roads	

(i) Listed and specified activities.

According to Listing Notice 1: List of activities and competent authorities identified in terms of Listing Notice 1 of 2014, published under Government Notice No. 983 in Gazette No. 38282 on 4 December 2014 as amended and published under Government Notice No. 327 in Gazette No. 40772 on 7 April 2017, in terms of Sections 24(2), 24(5), 24D and 44, read with Section 47A (1)(b) of the National Environmental Management Act, 1998 (Act 107 of 1998) the following activities are applicable according to the NEMA EIA Regulation.

- Activity 20 - Any activity including the operation of that activity which requires a Prospecting Right in terms of Section 16 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) including-
  a) Associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource, including activities for which an exemption has been issued in terms of Section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002)

b) The primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing, but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case Activity 6 in Listing Notice 2 applies.

- Activity 22 - The decommissioning of any activity requiring –
  (i) a closure certificate in terms of Section 43 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002); or

  (ii) a Prospecting Right, Mining Right, Mining Permit, Production Right or Exploration Right, where the throughput of the activity has been reduced by 90% or more over a period of 5 years excluding where the competent authority has a writing agreed that such reduction in throughput does not constitute closure; but excluding the decommissioning of an activity relating to the secondary processing of a –
    (a) mineral resource, including the smelting beneficiation, reduction, refining, calcining or gasification of the mineral resource; or

    (b) petroleum resource, including the refining of gas, beneficiation oil or petroleum products; -

  in which case Activity 31 in this Notice applies.

- Activity 24 - The development of a road –
  (i) a road for which an environment authorization was obtained for the route determination in terms of Activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or

(ii) a road with a reserve wider than 13.5 meters, or where no reserve exists where the road is wider that 8 meters; but excluding a roads
  (a) which are identified and included in Activity 27 in Listing Notice 2 of 2004
  (b) where the entire road falls within an urban area; or
  (c) which is 1 kilometer or shorter

- Activity 56 - The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometer –
  (i) where the existing reserve is wider than 13, 5 meters; or
  (ii) Where no reserve exists, where the existing road is wider than 8 meters

  excluding where widening or lengthening occur inside urban areas.

According to Listing Notice 2: List of activities and competent authorities identified in terms of Listing Notice 2 of 2014, published under Government Notice No. 984 in Gazette No. 38282 on 4 December 2014 as amended and published under Government Notice No. 325 in Gazette No. 40772 on 7 April 2017, in terms of Sections 24(2), 24(5), 24D and 44, read with Section 47A (1)(b) of the National Environmental Management Act, 1998 (Act 107 of 1998) the following activities are applicable according to the NEMA EIA Regulation.

- Activity 19 - The removal and disposal of minerals contemplated in terms of Section 20 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002), including –
  (a) Associated infrastructure, structures and earthworks, directly related to prospecting of a mineral resource; or

  (b) Including activities for which an exemption has been issued in terms of Section 106 of the Mineral and Petroleum Resources Development Act, 2002 (Act No 28 of 2002) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing, but excluding the secondary processing of a mineral resource including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case Activity 6 in this Notice applies.

Waste Management Activities List is hereby amended by the addition in Category A List of Waste Management Activities that have or likely to have a detrimental effect on the Environment, published under Government Notice No 921 of 29 November 2013 and amended by Government Notice Nr 322 of 2 May 2014, as amended and published under Government Notice No. 366 in Gazette No. 39020 on 24 July 2015, in terms of Sections 19(2)(a) and (19)(3)(a) of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

- Activity 15 - The establishment or reclamation of a residue stockpile or residue deposit resulting form activities which require a Prospecting Right or Mining Permit, in terms of the Mineral and Petroleum Resources development Act, 2002 (Act 28 of 2002)

Waste Management Activities Category B (Hazardous Waste) List of Waste Management Activities that have or likely to have a detrimental effect on the Environment, published under Government Notice No 921 of 29 November 2013 and amended by Government Notice Nr 449 of 2 June 2014, the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

- Activity 12 – Oil wastes and wastes of liquid fuels (except edible oils)
  (a) waste hydraulic oils
  (b) waste engine, gear and lubricating oils
  (c) waste insulating and heat transmission oils
  (d) oil/water separator contents
  (e) waste of liquid fuels
  (f) hazardous portion of other oil wastes

Waste Management Activities Category B (General Waste) List of Waste Management Activities that have or likely to have a detrimental effect on the Environment, published under Government Notice No 921 of 29 November 2013 and amended by Government Notice Nr 449 of 2 June 2014, the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

- Activity 11 - Building and demolition wastes
  (a) discarded concrete, bricks, tiles and ceramics
  (b) discarded wood, glass and plastic
  (c) discarded soil, stones and dredging spoil
  (d) other discarded building and demolition wastes

- Activity 12 - Domestic wastes
  (a) garden and park wastes
  (b) municipal waste
  (c) food waste

- Activity 13 - Inert waste
  (a) discarded concrete, bricks, tiles and ceramics
  (b) discard glass
  (c) discarded soil, stones and dredging spoil.

The following table breaks all the mining and mining related activities down for the purpose of footprint calculations and their individual listing.

NAME OF ACTIVITY (All activities including activities not listed) (E.g. Excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyers, etc... etc.... etc.)	**Aerial extent of activity Ha or m^2**	**LISTED ACTIVITY** Mark with an X where applicable or affected	**APPLICABLE LISTING NOTICE** (GNR 544, GNR 545 or GNR 546) / NOT LISTED
Geological investigations	1 733.0312 ha		NEMA 2017, GNR 327, Listed 1, Activity 20
Initial drilling	**< 0.0856 ha**		
Drilling	Total: 0.08 ha Per hole: 0.004 ha	X X	NEMA 2017, GNR 327, Listed 1, Activity 20(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Sampling		X	NEMA 2017, GNR 327, Listed 1, Activity 20(a)
Rehabilitation	0.08 ha	X	NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Ablution facility	Total: 0.0056 ha Per site: 0.0004 ha	X	NEMA 2017, GNR 327, Listed 1, Activity 20(a)
Vehicle storage		X	NEMA 2017, GNR 327, Listed 1, Activity 20(a)
Chemical storage		X X	NEMA 2017, GNR 327, Listed 1 Activity 20(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Diesel storage		X X	NEMA 2017, GNR 327, Listed 1, Activity 20(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Domestic waste facility		X	NEMA 2017, GNR 327, Listed 1, Activity 20(a)
Bulk sampling	**± 0.013 ha**		
Sample excavation	Total 0.01 ha Per site: 0.00 ha	X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMA 2017, GNR 983, Listed 1, Activity 22(i)

Topsoil	0.0005 ha	X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Overburden	0.0005 ha	X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Stockpiles	0.001 ha	X X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMWA 2015, GNR 633, Category A, Activity 15 NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Waste Dumps	0.001 ha	X X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category B, Activity 13(c) NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Prospecting Related structures	**± 0.4627 ha**		
Office site	0.0025 ha	X X	NEMA 2017, GNR 984, Listed 2, Activity 19(a) NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Plant site	0.1 ha		
Vibrating Screen Bourevestnik X-Ray plant Conveyor		X X X	NEMA 2017, GNR 984, Listed 2, Activity 19(b) NEMWA 2014, GNR 449, Category B, Activity 11(e) NEMA 2017, GNR 983, Listed 1, Activity 22(i)
Ablution Facility	0.0008 ha		NEMA 2017. GNR 984, Listed 2, Activity 19(a)

Vehicle parking	0.0308 ha		
Parking lot Wash bay Parts storeroom	0.02 ha 0.006 ha 0.0048 ha	X X X X	NEMA 2017, GNR 983, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category A, Activity 12(a), (b)and (d) NEMWA 2014, GNR 449, Category B, Activity 13(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Temporary workshop facility	0.0025 ha	X X X X	NEMA 2017, GNR 983, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category A, Activity 12(a), (b) and (d) NEMWA 2014, GNR 449, Category B, Activity 13(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Storage facility	0.0025 ha	X X X X	NEMA 2017, GNR 983, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category B, Activity 13(a) NEMWA 2014, GNR 449, Category A, Activity 12(a) and (d) NEMA 2017, GNR 327, Listed 1, Activity 22(i)
Diesel storage	0.0025 ha	X X X X	NEMA 2017, GNR 983, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category A, Activity 12(d) NEMWA 2014, GNR 449, Category B, Activity 13(a) NEMA 2017, GNR 327, Listed 1, Activity 22(i)

Domestic waste facility	0.0008 ha	X X	NEMA 2017, GNR 983, Listed 2, Activity 19(a) NEMWA 2014, GNR 449, Category B, Activity 12(b)
Power lines		X	NEMA 2017, GNR 983, Listed 2, Activity 19(a)
Security points		X	NEMA 2017, GNR 983, Listed 2, Activity 19(a)
Storm water control		X	NEMA 2017, GNR 983, Listed 2, Activity 19(a)
Access and hauling roads	0.4 ha	X X X	NEMA 2017, GNR 983, Listed 1, Activity 24(ii) NEMA 2017, GNR 327, Listed 1, Activity 56(ii) NEMA 2017, GNR 327, Listed 1, Activity 22(i)

	Activity total
	Grouped activity
	Information unknown / Cannot be determined

(ii) Description of the activities to be undertaken

(Describe Methodology or technology to be employed, including the type of commodity to be mined and for a linear activity, a description of the route of the activity)

- Construction
  - Drilling

    Drilling operations does not have a definite construction phase before commencement of the actual activities. The only activities happening before commencement of the drilling is the establishment of the drilling rig and chemical toilet facility.

    Before each hole is drilled an area of 7 x 4 meters for the drill rig and related equipment is cleared of vegetation. A further 3 x 2.5 meter area is needed for the sampling tubes. This totals to an area of 35.5 m², but for proper impact management the area for each borehole is set to 40 m². The chemical toilet facilities to be erected will have an approximate footprint of 2 x 2 m for every 2 holes to be drilled.

- Bulk sampling
  During the construction for the bulk sampling operations will an area of approximately 4 6024 m² be cleared for the mining related activities and structures. This site will also be clearly demarcated as well as the different structures.

  The main activity during the construction phase will be the following
  - Establishment of access and haul roads
  - The construction of new septic tanks and French drains
  - The establishment of pollution control structures in and around the workshops, washing bays, diesel tanks, chemical storage facilities and compressor rooms
  - The construction of the plant site
  - The removal of the growth medium over all the areas where initial mining will commence.
  - Construction of storm water berms at the mining area and around the plant as part of clean- and dirty water systems
  - The registrations of statutory requirements
  - The initiation of all monitoring programmes as per commitments of the EIA/EMPr

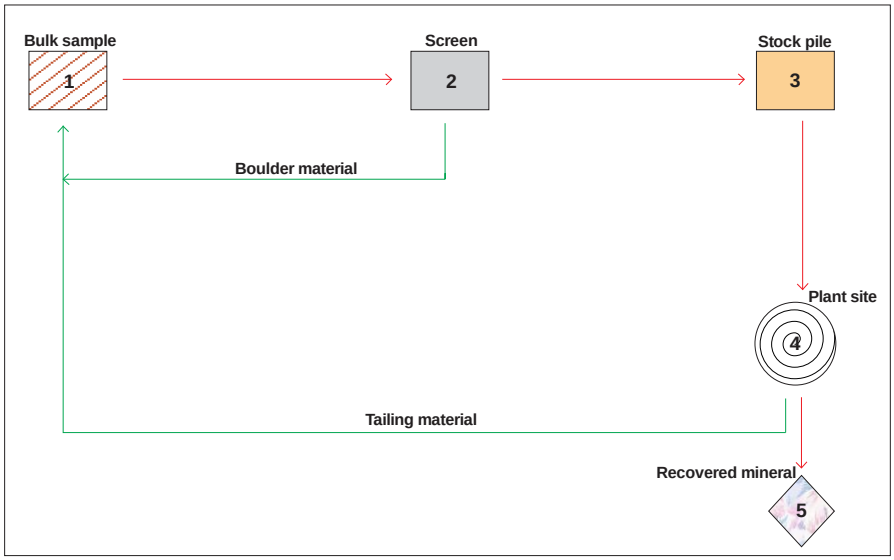
- Operational
  - Drilling
    During the drilling operations Reverse Circulation Percussion drilling will be conducted to determine the diamondiferous gravel occurrence on the area.

    20 Holes are proposed at demarcated places with an estimated average depth of 10 meters each. These holes will be drilled by means of standard Reverse Circulation Percussion drilling and the rock chops obtained captured with plastic tubes for logging and sampling.

    The drill holes will be logged every meter containing information such as hole location, hole depth, commodity depth and other geological structures encountered within the hole. Rock chip samples will be taken and stored within sealed chop trays and safeguarded for future referencing.

    As drilling commences rehabilitation will be done as each hole is completely drilled. This will be done by the backfilling of the rock chip material in their respective manner.

- Bulk sampling



Due to the shallowness and nature of the diamond bearing gravels, the bulk sampling will be done in blocks of 2 x 10 x 3 m and only one sample will be excavated and processed at any given time frame.

The topsoil and overburden will be removed and stockpiled separately next to the excavation for rehabilitation purposes.

The diamond bearing gravels is excavated and loaded on dumper trucks to be hauled to the plant site, where after the gravel is screened to remove all the rough boulder materials and the finer gravels stockpiled for mineral processing through a Bourevestnik X-Ray plant and all possible diamond recovered.

All oversize gravel screened, along with tailing from the recovery plant, will be used as pit back-fill. Surface rehabilitation will ensure that all overburden and original topsoil will be evenly spread across the disturbed areas.

Rehabilitation is an ongoing process and only one block will be excavated and rehabilitated at a time to ensure minimal final rehabilitation costs. To finalize the rehabilitation, process the overburden and topsoil will be evenly spread over the area. Regular inspections will be implemented to ensure successful re-establishment of vegetation species and for the removal of invader species where necessary.

- Decommissioning
  Once the prospecting activities have been completed the mine will start with the decommissioning. The entire area will be stripped of all structures. All remaining excavations will be fully rehabilitated and all compacted areas will be ripped and rehabilitated. Rehabilitated areas will be seeded with seeds of indigenous origin. A two to three year inspection programme will be implemented to ensure successful vegetation regrowth and all invader species will be removed.

e) **Policy and Legislative Context.**

APPLICABLE LEGISLATION AND GUIDELINES USED TO COMPILE THE REPORT (A description of the policy and legislative context within which the development is proposed including an identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and are to be considered in the assessment process)	**REFERENCE WHERE APPLIED** (i.e. Where in this document has it been explained how the development complies with and responds to the legislation and policy context)	**HOW DOES THIS DEVELOPMENT COMPLY WITH AND RESPOND TO THE POLICY AND LEGISLATIVE CONTEXT** (E.g. In terms of the National Act:- Water use license ha/has not been applied for)
No person may … prospect … for and produce any mineral … or commence with any work incidental thereto on any area without – a Prospecting Right	Section 5 (4)(b) of Act 28 of 2002 (MPRDA, 2002) read together with Section 5A (b) of Act 49 of 2008 (MPRDA, 2008)	An application has been lodge with the Department of Mineral Resources.
No person may … prospect … for and produce any mineral … or commence with any work incidental thereto on any area without – an approved Environmental Management Programme or approved Environmental Management Plan …	Section 5 (4)(a) of Act 28 of 2002 (MPRDA, 2002)	This document serves as the Environmental Impact Assessment / Environmental Management Programme Report
An Environmental Impact Assessment Report must contain all information that is necessary for the competent authority to consider the application and to reach a decision contemplated in Regulation 35 and must include - …	Regulation 31(2) of Act 107 of 1998 (NEMA, 1998)	These guidelines and provided template are used in conducting this assessment.
Waste resulting from ... prospecting ... and physical ... treatment of minerals	Category A listing of Act 26 of 2014 (NEMWA, 2014)	This document serves as the Environmental Impact Assessment / Environmental Management Programme Report

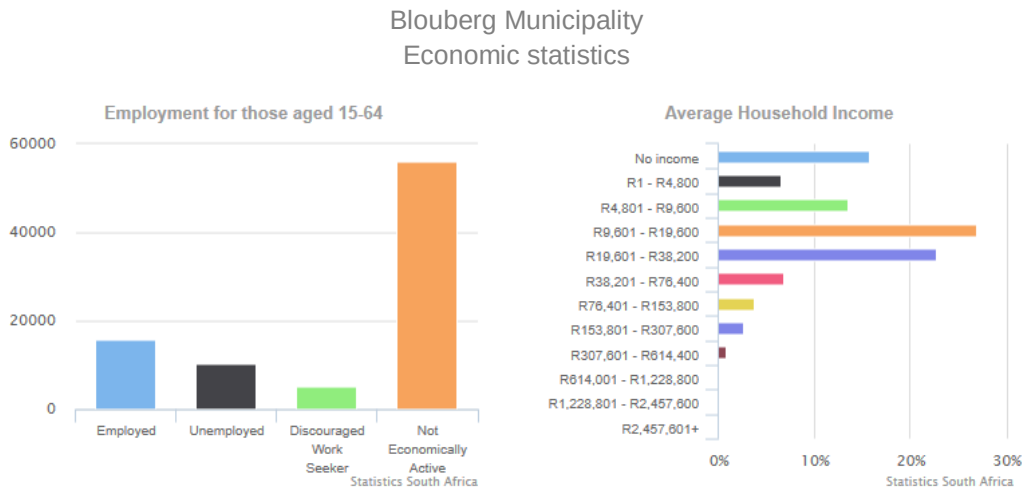
f) **Need and desirability of the proposed activities**

(Motivate the need and desirability of the proposed development including the need and desirability of the activity in the context of the preferred location)

The project area is situated within the Limpopo Province near the Botswana Border between Groblersbrug (63.4 km west south-west) and Maasstroom (49.5 km north-east) with the nearest town being Swartwater (20 km north north-west) and the nearest major town being Polokwane (190 km south south-east)

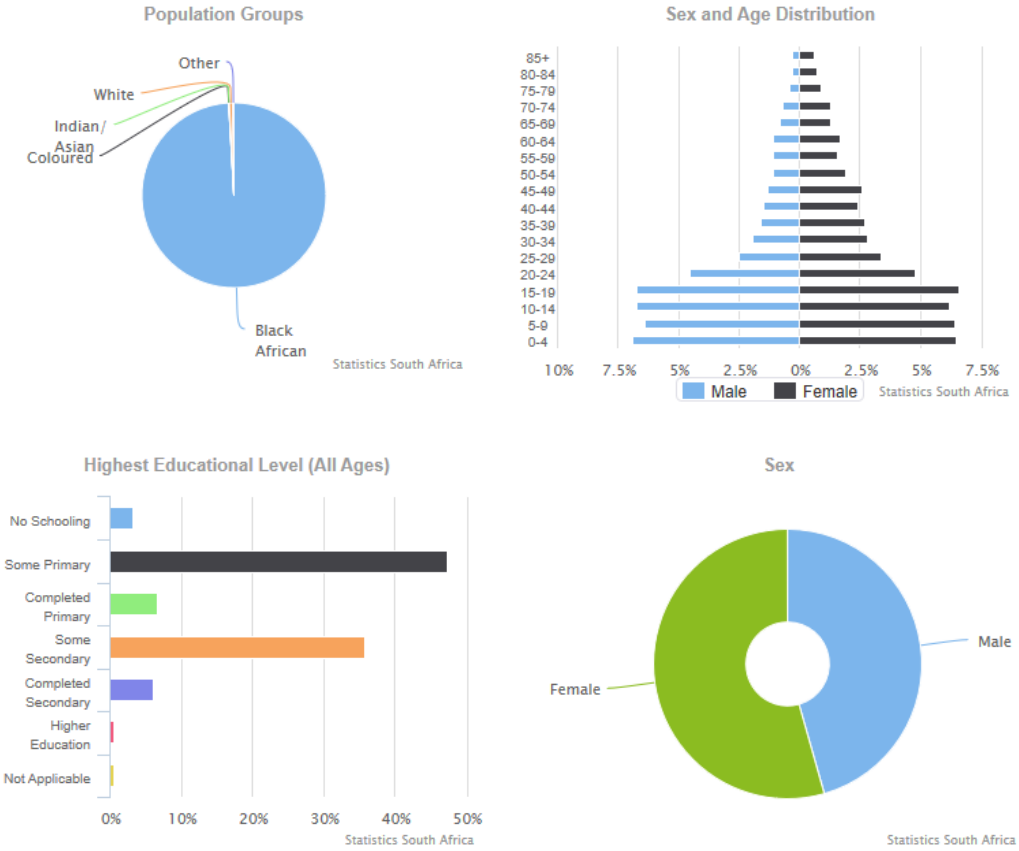
Blouberg Local Municipality is named after the Blue Mountains (Blou Berge), in and to the east of the area. The municipality is in Limpopo and was originally established in the year 2000 after the amalgamation of the Bochum-My-Darling, Alldays-Buysdorp, and parts of Moletjie-Matlala TLCs. It is situated in the North western boundary of the Republic of South Africa with Botswana and Zimbabwe where the Limpopo River serves as the border between the municipality, Botswana and Zimbabwe. It is largely a rural municipality with 99,8% of the settlement being tribal or traditional land, 95 km from Polokwane.[1]

Livestock and game farming, as well as mining, drive the municipality's economy. The unemployment rate in the Blouberg Municipality is 39.2%, with the youth unemployment rate standing at 47.2%. The main contributing factor to the low levels of employment in the region is the high percentage (94.8%) of the labour force that has not obtained a Grade 12 Senior Certificate and/or higher qualification, resulting in a primarily unskilled labour force[1].



[1] Statistics of South Africa, Census 2011, *http://www.statssa.gov.za/? page_id=993&id=blouberg-municipality*, September 2019

Blouberg Municipality
Population statistics



The purpose of the propose operations is to determine the existence and later the feasibility of the diamondiferous gravel. Most of the individuals to be employed by the mine will be derived from the nearest communities, giving not just a rise to the economic sector, but also on a household level eradicating poverty within the towns' boundaries. Indirectly will the employment of local individuals also aid in the fight to decrease the crime and mortality rate of the area.

Should the prospecting results indicate feasible mining operations and the project is developed, medium scale job creations may occur leading to further economic growth of the area and region.

The proposed location of the plant site and related structures is planned as such in the attempt to be of minimal disturbance to the environment and the farming activities.

g) **Motivation for the preferred development footprint within the approved site including a full description of the process followed to reach the proposed development footprint within the approved site.**

NB!! – This section is about the determination of the specific site layout and the location of infrastructure and activities on site, having taken into consideration the issues raised by interested and affected parties, and the consideration of alternatives to the initially proposed site layout.

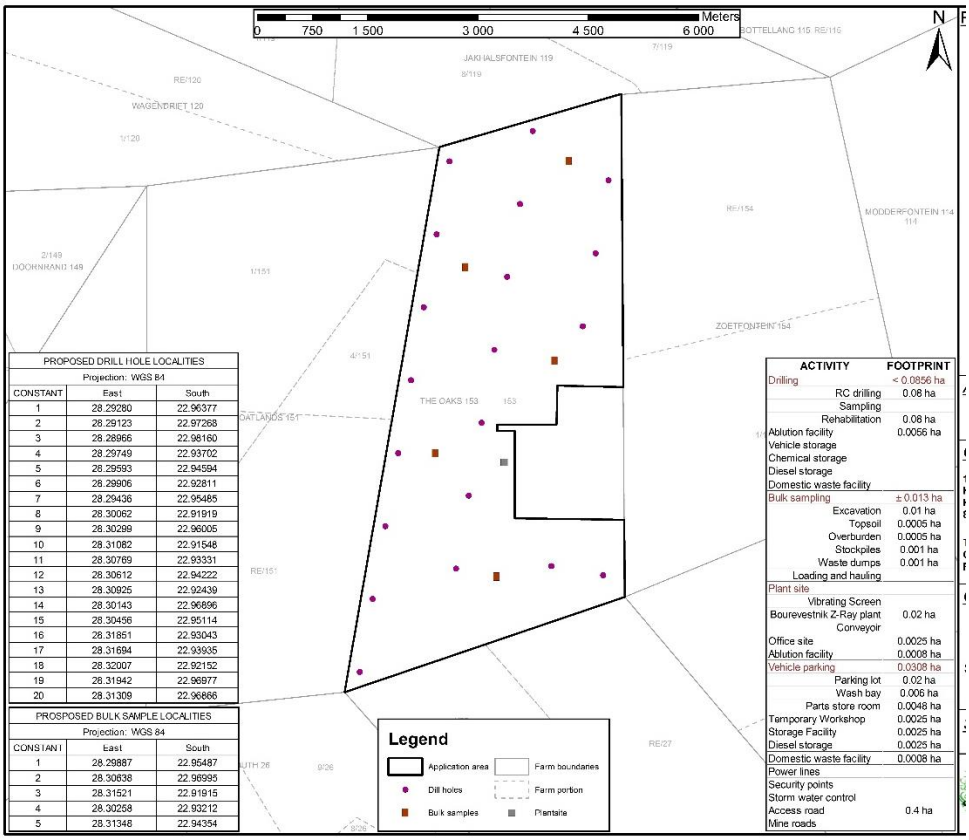
During the planning of the proposed prospecting operations taking the diamondiferous gravel bodies and environmental sensitive features into consideration the only alternatives that could be explored was towards the relocation of prospecting locations, the prospecting related structures and processes.

Most of the prospecting related structures were planned outside any environmental feature and their respective buffer zones as well as trying to minimize the footprint and environmental disturbance. Further alterations will be explored during the course of this document and later on during the operations as the need arise.

i) Details of the development footprint alternatives considered.

With reference to the site plan provided as Figure 2 and the location of the individual activities on site, provide details of the alternatives considered with respect to:

(a) the property on which or location where it is proposed to undertake the activity;
(b) the type of activity to be undertaken
(c) the design layout of the activity
(d) the technology to be used in the activity
(e) the operational aspects of the activity; and
(f) the option of not implementing the activity.



The total aerial extent for the prospecting activities to be authorized and rehabilitated is approximately 0.561 ha. As rehabilitation is planned as an integral part of the prospecting activities final rehabilitation during decommissioning of the project will be minimal and rehabilitation less costly.

- Geological investigations
  - This activity will be through desktop studies and field visits. The desktop studies will be conducted through the studying of existing literature, geological maps, aerial photography and satellite imagery. Field visits will only be conducted to verify the desktop findings through surface mapping.

  - The technology used will be updated date from various sources and computer software. Field visits are done per foot and modern GPS devices

  - This activity is necessary as to verify the possible occurrence of the commodity bodies within the area, before invasive operations is conducted. Should this activity not be implemented can further prospecting planning be haltered and the best possible options not explored.

- Initial Drilling
  - Drilling
    - It is proposed that 20 holes are drilled on the demarcated localities up to an average depth of 10 meters. These holes will each have an overall footprint of 40 m² consisting of a 7 x 4 m area for the drill rig with complementary equipment and a 3 x 2.5 m area for sample laying for geological processing.

    - The technology used in this activity will be a Reverse Circulation Percussion drill rig, equipment trailer as well as a water and diesel cart

    - Holes will be drilled and rock chips obtained, which will be captured within plastic tubes for logging and sampling. These chips obtained are geologically logged every meter and small samples taken and stored within chip trays for future refencing.

    - This activity is necessary to determine the location, extent and depth of the possible ore bodies. Alternatives to be considered are the location of these holes in relation to the environmental features or exercising a no-go option

- Ablution facility
  - Chemical toilet facilities (each with a footprint of 2 x 2 m), will be implemented during the drilling operations. The total footprint of 0.0056 ha is derived as these facilities will be relocated from time to time for ease of access.

  - Contractual agreements will be made and basic flushing chemical toilets installed. Within the facility will sanitary bins be provided for female specific needs and emptied on a daily basis. The contracting sanitary company will be responsible for the regular maintenance and servicing of these facilities.

  - These facilities are to support the sanitation protocol of the mine and will be readily available for personal use as needed

  - The implementation of this structure and related activities is absolutely compulsive and enforced by the Basic Conditions of Employment Amendment Act, 2013 (Act 20 of 2013) in conjunction with the Basic Condition of Employment Act, 197 (Act 75 of 1997), Basic Conditions of Employment Act, 2002 (Act 68 of 2002) and Basic Conditions of Employment Act, 2003 (Act 52 of 2003)

- Vehicle storage
  - A specific footprint of the parking of vehicles is not calculated as it is planned and will form part of the drilling footprint to minimize the overall operations footprint

  - Drip pans will also be readily available for vehicles during off-time. No other technologies will be used during this activity.

  - All vehicles will be parked in this area and will be required to adhere to the reversed parking policy for the safety of all vehicles in the case of an emergency

  - Alternatives towards this activity will be the relocation with the drill hole localities to protect and/or avoid environmental features. This activity is the alternative to a separate vehicle parking zone to ensure minimal environmental disturbance.

- Chemical storage
  - The storage facilities are situated on the supplementary drill vehicle on the already demarcated footprint of 40 m². The storing of chemicals on the vehicles is to ensure minimal environmental disturbance and handling areas

  - This activity's main function is for the storing and controlling of legislative regulated and/or non-legislative regulated chemicals. The different types of chemicals must be stored separately as well as a differentiation between used and un-used chemicals should be made. Containers can also be available for the storage of used mechanical parts till the removal thereof.

  - The option of not implementing this activity is legislatively ruled out by specific regulations within the Mineral and Petroleum Resources Development Act and National Environmental Management Act regarding the storing of environmental hazardous chemicals.

- Diesel storage
  - The drill contractors will supply their own diesel in the form of a diesel cart (± 1 000 liter) with already installed bunker bay and will be parked on an impervious sheet within the drilling footprint. No specific footprint is calculated for this activity as it forms part of the calculated drill site footprint of 40 m²

  - The technology used shall be of the highest standards provided by the drill contractors

  - Diesel will be kept within the cart for refueling purposes during the drilling operations. The drill contractor will be responsible for the refueling and maintenance inspection of the cart on a regular basis in town. Machinery will be parked on a plastic floor for refueling activities/

  - Trampling of vegetation is a high probability if the drill vehicle must use town facilities for refueling with the probability of jamming the traffic for a period of time. An alternative to be considered during the drilling operations is that the diesel cart is removed from the site during off-time, but may have a greater impact on the environment due to vegetation disturbance while not showing to have a lesser probability for diesel storage.

- Domestic waste facility
  - The domestic waste facility will be installed on the supplementary vehicle for discarding of domestic waste materials.

  - The technology used shall be of local municipal standard including a tip-proof and scavenger proof container with lid. The drill contractors will be responsible for the daily removal of waste from site to the nearest town or town of accommodation and discarded at the municipal's registered dump facility

  - All domestic waste on site will be place within these bins to keep the area clean and litter free

  - The option of not implementing the activity cannot be taken into consideration as it will result in litter pollution having a huge impact on the environment.

- Bulk sampling
  - Sample excavations
    - Five bulk samples with an overall volume of 300 m^3 is proposed in demarcated places determined by the previous prospecting phases. Only one bulk sample will be excavated, tested and rehabilitated at a time. This methodology is to ensure accurate statistical and geological information on that specific area. All diamonds recovered will also be logged and handled separately.

    - The technology used in this activity will be excavators, grizzly screens and dumper trucks to transport the excavated material from the excavation to the plant site.

    - Diamondiferous gravel is excavated for diamond recovering purposes. The topsoil and overburden are removed where necessary and stored near the excavation for easier rehabilitation activities. The gravel is excavated, screened and transported to the plant site for mineral processing and diamond recovery.

    - This activity forms the basis of all diamond mining operations and is necessary to test the feasibility of the diamondiferous gravel as well as the diamond grade and quality distribution over the area. This activity cannot be regarded for a no-go option, but alternatives can be explored to minimize the negative effects on the environment.

- Topsoil and overburden dumps
  - All topsoil and overburden material removed is stored in close proximity of the excavations for rehabilitation purposes.
  - No technology will be used in this activity other than dumper trucks transporting the material from the excavation and back during rehabilitation
  - The operational aspect of this activity is for the safe storage of these dumps till the rehabilitation of a disturbed area. The topsoil also serves as a natural seedbed for the re-establishment of vegetation after rehabilitation.
  - If this activity is not implemented the bulk sampling activities cannot continue and/or rehabilitation activities haltered. Alternatives to this activity cannot be considered as these dumps need to be created in order for the diamondiferous gravel to be removed and processed, but the total footprint can be minimized dependable on the method of prospecting to be implemented.
- Stockpiles
  - All gravel material removed and screened will be stockpiled close to the processing plant site for optimal operations. The stockpile is calculated to have an average footprint of 10 m² during any given time of the bulk sampling operations
  - No technology will be used in this activity other than dumper trucks transporting the material to the stockpile and front-end loaders feeding the plant
  - Screened diamondiferous gravel is centrally stored near the plant site of ease of operations as well as the separation of the processable gravel from the waste rock.
  - If this activity is not implemented bulk sampling activities cannot continue fluently affecting the cost effectiveness of the operations and the outcome of the prospecting programme.

- Waste and tailings dump
  - Waste rock will be hauled from the various mining processes and stored separate from the stock dumps, but will remain in the same region. The specific design of this activity is dependent on the amount of waste rock generated during the activities. The waste dump is calculated to have an average footprint of 10 m² during any given time of the mining operations

  - No technology will be used during this activity as this activity is solely for the storing of waste materials till rehabilitation commence and finalization of rehabilitation.

  - The operational aspect of this activity is the storing of waste rock till the removal thereof, usage in prospecting related features or rehabilitation of excavated areas.

  - Alternatives to this activity is ruled out by the fact that waste rock is a by-product of any bulk sampling activity and must be stored till usage or rehabilitation of the ecavated areas.

- Prospecting/Bulk sampling related structures
  - Office block
    - The office block will be constructed near the project area entrance as a green zone. This activity will have an approximate footprint of 25 m² housing several smaller offices including a mine manager's office, first aid room and employee rest room

    - The office block will be more in the form of mobile containers to minimize environmental impact. Air conditioning and electricity will be installed to provide a comfortable environment as core discussions and decisions will be done within this structure.

    - All administrative activities, discussions, contractual agreement, storing of files, prospecting financials and storing of financial statement etc. will be occurring within the offices.

    - Taking the rural setting of the project location into consideration the best option is to keep the offices within the premises for proper managing, activity regulation, accident and damage control.

    - The use of mobile containers is the alternative option used to minimize the environmental disturbance. Formal brick constructions will have a more severe impact on the environmental as well as a bigger activity footprint.

- Processing plant / Plant site
  - The processing plant site (approximately 0.02 ha in footprint) shall not be formally demarcated, but demarcated with berms to indicate the allowed area for movement. Equipment used within this site will be installed in an almost inline manner for sufficient and effective mineral processing operations.

  - The technology used for the mineral processing are a screen and a Bourevestnik plant.

  - The stock material is loaded into a feeder bin, which feeds the screen to obtain an optimal gravel size of -50 mm +5 mm. The latter is directly fed to the Bourevestnik plant at a rate of 45 tons per hour for diamond recovery.

    - As this activity cannot be ruled out and the best alternative explored to be implemented is the usage of more specialized equipment, which eliminated some equipment, to reduce the environmental footprint, environmental destruction as well as aiding in the conservation of water resources.

- Ablution facilities
  - Ablution facilities (with a total footprint of approximately 8 m^2), separating male and female employees, will be constructed with one toilet per every 15 people.

  - Contractual agreement will be signed and basic flushing chemical toilets installed. Within the female facility will sanitary bins be provided for their specific needs and emptied on a daily basis.

  - The ablution facilities are to support the sanitation and hygienic protocol of the project. These facilities will be readily available for personal use as needed.

  - The implementation of this structure and related activities is absolutely compulsive and enforced by the Basic Conditions of Employment Amendment Act, 2013 (Act 20 of 2013) in conjunction with the Basic Conditions of Employment Act, 1997 (Act 75 of 1997), Basic Conditions of Employment Amendment Act, 2002 (Act 68 of 2002) and Basic Conditions of Employment Amendment Act, 2003 (Act 52 of 2003).

- Vehicle parking
  - The vehicle parking area (208 m²) is designed to house a designated vehicle parking (200 m²), concrete constructed wash bay (60 m²) and an auto-parts storage facility (48 m²). The area will also be cleared off all vegetation, levelled and parking zones demarcated either with berms or waste rock.

    - Wash bay
      - The wash bay is planned to be constructed at the vehicle parking area. The floor must be constructed at a gradient with a channel at the lowest side relaying water and oils to a run-off sump from where it will be pumped in containers and discarded in the appropriate manner.

      - This facility should be equipped with all the necessary equipment and stock for the daily trade activities of washing equipment and vehicles.

      - This facility serves as a secured working space where equipment and vehicles can be cleaned for maintenance purposes.

      - The option of not implementing this activity is not the best option to consider as tradesmen and a workspace for them are an essential part of mechanical operations.

    - Parts storeroom
      - The parts storeroom is planned to be constructed near the workshop. This should be a closed facility with the option of a door that can be locked.

      - This facility will be equipped with all the necessary auto-motive and equipment parts for the daily maintenance and repair activities of overall maintenance.

      - This facility serves as a secured storage facility for parts and equipment needed for the employed tradesmen to be able to optimally perform their daily tasks.

      - The option of not implementing this activity is not the best option to consider as if the basic and necessary parts are not available it must be obtained within the towns that may proof to be difficult, expensive and time consuming.

- The parking area as a whole will be informally demarcated using tailing from the plant site. Drip pans will also be readily available for vehicles during off-time. No other technologies will be used during this activity.

- The parking area will be sectioned and demarcated for the various activities. All mine vehicles, visitors' vehicles, employee vehicles and heavy vehicles will be parked in this area within their different sections. All vehicles will however be required to adhere to the reversed parking policy for the safety of all vehicles in the case of an emergency.

- Should this activity not be implemented pollution and chemical spill control cannot be optimally managed as well as the informal parking of other normal vehicles can lead to a difficult driving environment for heavy vehicles. For this reason and legislative requirements this activity cannot be excluded as a prospecting related activity and thus planned to be implemented during the construction phase of the bulk sampling activities.

- Temporary Workshop facility
  - The workshop is planned to be constructed with a footprint of 0.0025 ha. The workshop should be a closed facility with the option of a door that can be locked, but can also take the form of a barnlike structure. The floor however must be constructed at a gradient with a channel at the lowest side relaying water and oils to a run-off sump from where it will be pumped in containers and discarded in the appropriate manner.

  - This facility should be equipped with all the necessary equipment and stock for the daily trade activities of mechanical maintenance, electric maintenance, plumbing, boiler making, fitting and turning and all other related activities needed for the successful operations of the project.

  - This facility serves as a secured working space for mine employed tradesmen containing all the necessary equipment to their disposal for optimally performing their job

  - The option of not implementing this activity is not the best option to consider as tradesmen and a workspace for them are an essential part of bulk sampling and prospecting related activities. If this activity is not implemented maintenance, rectifying and building of certain materials and equipment will need to be done within the towns that my proof to be difficult, expensive and time consuming.

- Storage facilities
  - The storage facilities (approximate footprint of 0.0025 ha) are situated at the administrative portion of the mine. This is to ensure access control and regulation of chemical handling. The facility should be a well ventilated and constructed with the ability to be locked.

    Within this structure several leak-proof 'bays' must be present for the different chemicals to be stored as well as being large enough to contain the total volume of that specific chemical containers combined plus 5%.

  - Ventilation within this facility can be ensured through adequate roof ventilation systems. The structure itself and bays will be erected according the engineering plans and the recommendations of the engineer for materials suitable for this activity.

  - This facility's main function is for the storing and controlling of legislative regulated and/or non-legislative regulated chemicals. The different types of chemicals must be stored separately as well as a differentiation between used and un-used chemicals should be made. Containers can also be placed within this storage facility for the storage of used mechanical parts till the removal thereof.

    Once the use chemical containers are approximately 80% full the relevant agencies will be contacted for handling and correct removal of such a chemical.

  - The option of not implementing the activity is legislatively ruled out by specific regulations within the Mineral and Petroleum Resources Development Act and National Environmental Management Act regarding the storing of environmental hazardous chemicals.

- Diesel tank/storage
  - One diesel tank (± 23 000 liter) and its will be active for the duration of the bulk sampling activity. The footprint (total 25 m²) will house the diesel bay (18 m²) containing tank volume plus 10% and re-fueling floor.

  - The technology used shall be of the highest standards provided by the contracting diesel/fuel agency. It is compulsive that the mine is supplied with a diesel tank already equipped with a leak-proof bay to prevent any ground contamination should the tank be leaking by fault or bursting.

- Diesel will be kept within these containers for refueling purposes during the bulk sampling activities. The contracting agency will be refilling these tanks on a regular basis and only then will the tank be assessable for inspection and maintenance procedures.

  Machinery will be parked on a cement slap next to the tank for refueling activities. These cement slaps shall be constructed at a gradient with a run-off channel leading to a sump for impact prevention should any accidental spillage occur. The sump will also be cleaned and maintained on a regular basis by the contracting agency.

- Taking the rural setting of the project into consideration alternatives to this activity was regarded as a no-go option. The reason for such is that should there not be diesel available for refueling on site these huge mining vehicles must go into town for their refueling needs that will lead to traffic congestions, trampled roads and possible major accidents that could have been avoided.

- Domestic waste facility
  - The domestic waste facility (approximate footprint of 2 x 4 m) will be installed at the office sites.

  - The technology used shall be of local municipal standard including a tip-proof and scavenger proof bin. Agreements with the local municipality will be signed for the removal of waste on their schedule.

  - All domestic waste on site will be placed within these bins to keep the area clean and litter free

  - Alternatives to this option can be taken into consideration, but should the activity not be implemented a greater risk of littering results.

- Power lines and power point
  - The power point (with an unknown footprint) will be installed at for power connection. The power line (unknown footprint) will be installed from the Generator running to the various activities (Processing plant, office buildings, etc.) requiring electricity for operations.

  - The technology to be used for this activity is solely dependent on the electricity needs of the mine and the technology available.

- The operational aspect of the activity is to serve the bulk sampling and prospecting related activities with the necessary electricity for their various operational activities.

- The option of not implementing the activity is regarded as a no-go option as the processing and some prospecting related activities require electricity to be operational. Alternatives being explored is to rather make use of ESKOM, but is highly dependent on the engineer planning.

- Security point
  - Secure entrance with a security point will be constructed and implemented at the project area entrance.

  - A Wendy house will be placed at this point as an 'office' for the security guards where from where they will be performing their daily duties. Telecom services should be implemented for the confirmation of a certain meetings or the knowledge of the visitor before acceptance onto the grounds.

  - This activity primarily serves in the regulation of authorized entrance into the project area. Secondary functions include the enforcement of alcohol-breather-testing, mine safety requirements and register signing.

  - This activity is absolutely necessary for the safety of the project, employees, contractors and the public in general. Any unauthorized entrance into restricted areas can have devastating consequences. For the above reason the option of not implementing the activity is regarded as an absolute no-go option.

- Access and Hauling roads
  - The location and amount of mine roads will be finalized during final Mine planning and the construction phase. The exact footprint of these roads are unknown as it may vary due to final planning and the need of relocating planned roads.

  - No foreign materials will be used in the construction of these roads. The roads will be scraped to specific measures and maintained on a regular basis. During maintenance may the roads be sprayed with non-polluting substance mixed in water to chemically bound dust particles to aid in dust reduction and even in some cases prevention.

  - The roads will be mainly used for prospecting related traffic such as hauling of materials to different sites, employee travelling from one site to another etc.

- Should roads not be implemented and vehicles are allowed to travel how they please trampling of natural vegetation is a given factor leading to greater environmental degradation than the construction of these hauling roads. For this reason the option of not implementing the activity is ruled out in order to protect the surrounding environment as far as possible.

ii) Details of the Public Participation Process Followed

Describe the process undertaken to consult interested and affected parties including public meetings and one on one consultation. NB the affected parties must be specifically consulted regardless of whether or not they attended public meetings. (Information to be provided to affected parties must include sufficient details of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land.)

Consultation the MPRDA Section 102 application and amendment to the Environmental Authorization as well as the Environmental Impact Assessment / Environmental Management Report was done whereby the identified Affected parties, neighboring farm owners and all relevant Departments were consulted and a 30 day period given with the request to review this document for comments.

iii) Summary of issues raised by I&Aps
(Complete the table summarizing comments and issues raised, and reaction to those responses)

Interested and affected parties. **List the names of persons consulted in the column and** **Mark with an X where those who must be consulted were in fact consulted**		**Date comments received**	**Issues raised**	**EAPs response to issues as mandated by the applicant**	**Section and paragraph reference in this report where the issues and or response were incorporated.**
AFFECTED PARTIES					
Landowners					
Transanga Carrieres CC	X				
Lawful occupiers of the land					
Landowners or lawful occupiers on adjacent properties					
Remote Surveillance Solutions (Pty) Ltd	X				
Zoetkremetart (Pty) Ltd	X				
Jirastep (Pty) Ltd	X				
Leliepan Property Investments (Pty) Ltd	X				
Municipal councilor					
Municipality					
Blouberg Municipality	X				

Organs of state (Responsible for Infrastructure that may be affected Roads department, Eskom, Telkom, DWA etc.					
Dept. Water Affairs and Sanitation	X				
South African Heritage Resources Agency	X				
Communities					
Dept. Land Affairs					
Dept. Rural Development and Land Reform	X				
Traditional leaders					
Dept. Environmental Affairs					
Dept. Environment and Nature Conservation	X				
Other Competent Authorities affected.					
<u>OTHER AFFECTED PARTIES</u>					
<u>INTERESTED PARTIES</u>					

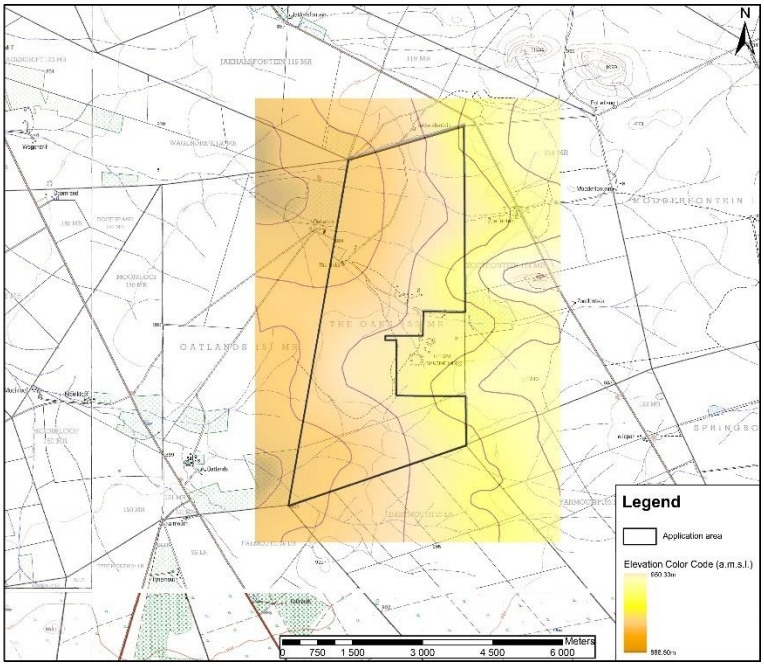
iv) The Environmental attributes associated with the development footprint alternatives. (The environmental attributed described must include socio-economic, social, heritage, cultural, geographical, physical and biological aspects)

(1) Baseline Environment

(a) Type of environment affected by the proposed activity

(Its current geographical, physical, biological, socio-economic, and cultural character)

- Geographical environment:
  - Geographical location: The proposed project area is situated within the northern province of South Africa, Limpopo, approximately 19.3 km east-southeast of the town Swartwater and 22.5 km west-northwest of Tolwe. The area can be reached via a gravel road from Swartwater, situated on the R572, towards Tolwe in a south-eastern direction.

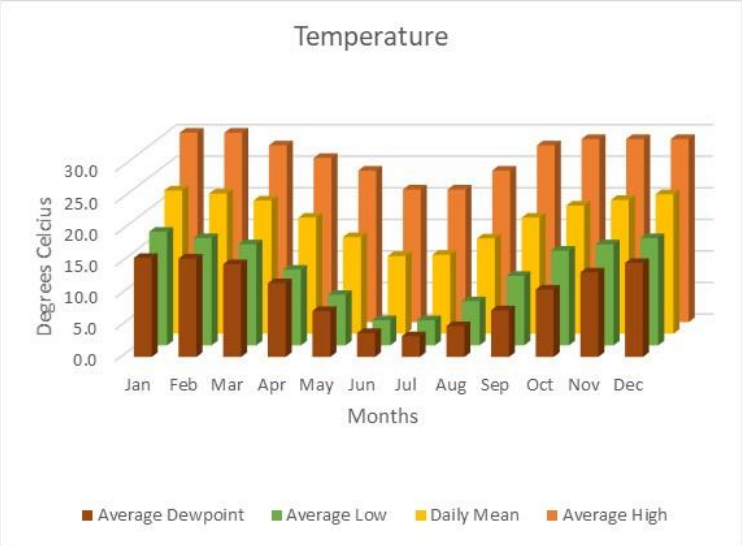


  - Climate and rainfall: The weather provides hot wet summers and mild dry winters. The infrequent summer rains tend to take the form of severe thunderstorms and occasionally prolonged soft showers. It is not unusual for winter night-time temperatures to drop below freezing.

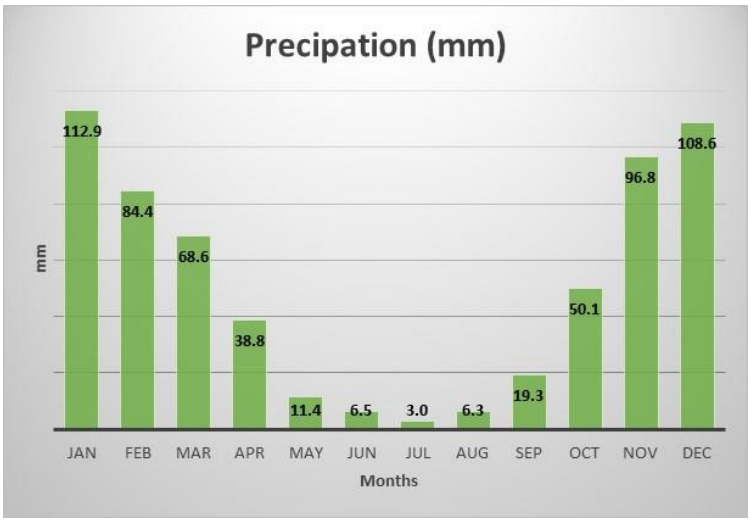
CLIMATE DATA FOR MOKOPANE (Nearest station to projct site)													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Record High °C	39	41	40	36	33	30	29	34	39	40	39	40	37
Average High °C	30	30	28	26	24	21	21	24	28	29	29	29	27
Daily mean °C	22.7	22.2	21.1	18.4	15.3	12.3	12.5	15.1	18.4	20.3	21.2	22.1	18.5
Average Low °C	18	17	16	12	8	4	4	7	11	15	16	17	12
Record Low °C	10	11	9	-1	-6	-6	-8	-4	-1	2	5	8	2
Precipation (mm)	112.9	84.4	68.6	38.8	11.4	6.5	3.0	6.3	19.3	50.1	96.8	108.6	50.6
Avg. prescipitation days	11.3	8.8	8.6	5.8	2.4	1.3	0.8	1.2	2.2	6.6	11.1	11.7	6.0
Avg. Frost days													
% Humidity	64.7	66.2	66.7	64.9	59.0	56.3	53.3	50.7	48.7	54.2	61.2	63.6	59.1
Avg. Dew point	15.7	15.6	14.7	11.7	7.3	3.8	3.3	4.9	7.4	10.7	13.4	14.9	10.3
Avg. Length of day	13.8	13.3	12.6	12.6	11.3	11.1	11.2	11.7	12.4	13.1	13.7	14.0	12.6

Source: Weatherbase.com, MSN weather (September 2019)

The average temperature for the year in the project area is 18.5 °C. The warmest month, on average over an approximate 10 year period, is January with an average temperature of 27 °C and the coolest month being July with an average temperature of 12 °C.[2]

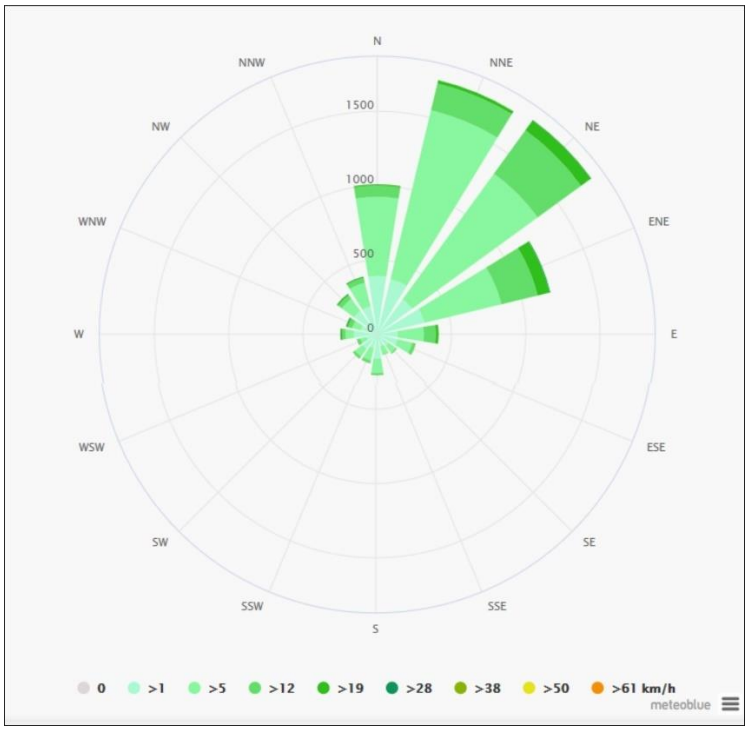


The project area falls within the summer rainfall area with a mean annual average precipitation of 50.6 mm, which accumulates to ±607 mm per year. The month with the most precipitation on average is January with 112.9 mm and the month with the least precipitation on average is July with an average of 3 mm. There are on average 72 days of precipitation per annum, with the most precipitation occurring in January over 11.3 days and the least precipitation occurring in July over 0.8 days.[2]

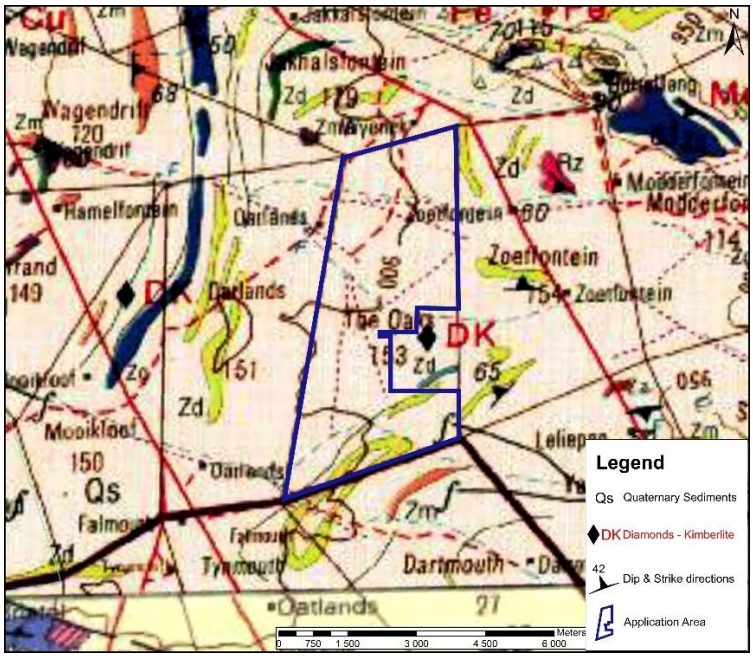


[2] http://www.weatherbase.com/weather/weather.php3?s=604975&cityname=Mokopane-South-Africa *&units*=, September 2019

- Wind: Over a thirty-year period the prevailing wind direction changed slightly from north-northeast to northeast, which is also the predominant direction. Wind speed varies from 0 to 28 km/h with an overall average of 13.5km/h.



- Geology and soils: The project area is situated within the Limpopo Mobile Belt, seemingly part of the central/southern zone/s. The surface consists of Quaternary soils/sands, eroded from the underlying gneisses.



The Oaks kimberlite, situated on the property, forms part of the Marnitz Kimberlite Province, discovered by De Beers in 1986. The kimberlites are all of the Group I type and are intrusive into the quartzo-feldspathic and amphibolitic gneisses of the Limpopo Mobile Belt. The Oaks is a kimberlite pipe of approximately a hectare in size.

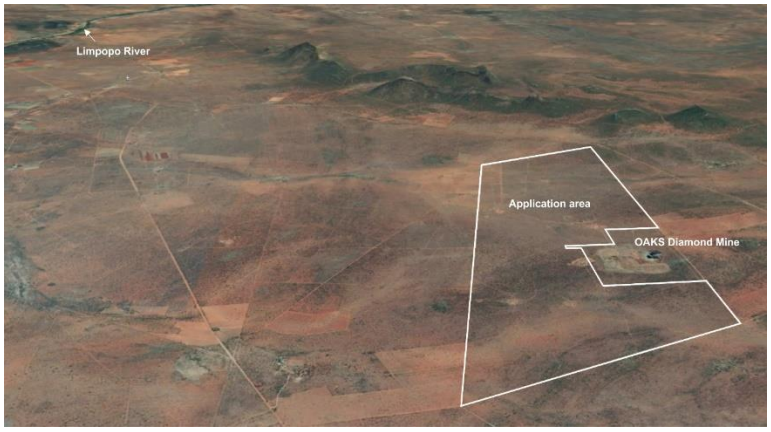
The extend of the pipe and its depth, including its estimated life of mine of 8 years, indicates that this kimberlite was eroded to almost the base of its root. All of the material had been eroded away and was transported towards the west/north-west into the current Limpopo River.

Based on similar geological models, it is very possible that the colluvial material, transported from the Oaks kimberlite, could be captured within the paleo valleys of the streams draining the area at the time. Due to short transporting distances, all diamond qualities, as found in the mine, would still be present in the alluvial deposit itself, including grades.

Considering the mineral economics of the Oaks mine itself, grades of up to 36cts/100t can be expected at an average price of ±USD138.00/ct.

- Physical environment:
  - Topography: The project area lies at an elevation of approximately 890 m above sea level in the west and 950 m in the east, resulting in a relative undulated landscape with an absolute slope towards the Limpopo River in the west.

    The two most prominent topographical features are a range of hills north of the project area, rising more than 100 m above the surrounding landscape, and the De Beers owned OAKS Diamond Mine in the central portion of the property.



- Surface Water:

Major rivers and streams within the Limpopo River basin

The mining area is located within the upper Limpopo Drainage system, situated in the Mogalakwena sub catchment drainage system, which covers an area of 20,248 km².

The project area has a Mean Annual Precipitation (MAP) of 386 mm and a Mean Annual Evaporation (MAE) of 1 902 mm. The run-off water drains into the Mogalakwena steam that flows through the south of the farm in a northwestern direction into the Limpopo River over a distance of 16.9 km, where it contributes to the larger Upper Limpopo Basin's and eventually to the Limpopo Basin's runoff.

The following table reflects the Mean Annual Run-off (MAR) figures of the sub-basin;

Characteristics of the Mogalakwena Sub-basin		
Tributary	**Catchment (km^2)**	**Naturalized MAR (mil m^3)**
Mogalakwena	20 248	269
Denaturalized MAR (mil m^3)	**Ecological reserve (mil m^3)**	**Unit runoff (mm)**
79	41	3.92

- Ground water: Based on information available at present, very little data is available on groundwater in the direct vicinity of the property.

Water management of the Mogalakwena Sub-basin								
Subarea	Natural resource		Usable return flow			Total local yield	Water transfers	Grand total
	Surface water	Ground-water	Irrigation	Urban	Mining and bulk			
	(million m^3/year)							
Mogalakwena	50	15	3	4	0	72	3	75

- Biological environment:
  - Fauna[3]: Taking the cultivation/mining status of the area in consideration little probability exists for the free roaming of wildlife, except for nocturnal animals and those being farmed with.

Common animals within the area:

Black-backed Jackal	*Canis mesomelas*
Yellow mongoose	*Cynictis penicillata*
Impala	*Aepyceros melampus*
Gemsbuck	*Oryx gazella*
Waterbuck	*Kobus ellipsiprymnus*
Kudu	*Tragelaphus strepsiceros*
Eland	*Tragelaphus oryx*
Scrub Hare	*Lepus saxatilis*
Common Mole-rat	*Cryptomys hottentotus*
Cape Porcupine	*Hystrix africaeaustralis*

Common birds within the area:

Various owl species	
Guineafowl	*Numida meleagris*
African snipe	*Gallinago nigripennis*
Jackal buzzard	*Buteo rufofuscus*
Capped wheatear	*Oenanthe pileata*
Cisticola	*Cisticola juncidis*
Common Quail	*Coturnix coturnix*
Crowned plover	*Vanellus coronatus*
Grassveld Pipit	*Anthus cinnamomeus*
Hadada	*Bostrychia hagedash*

[3] Derived from approved EIA/EMPr

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Threatened species according the IUCN are color coded according their different categories[4]:

Near threatened: A species is Near Threatened when available evidence indicates that it nearly meets any of the IUCN criteria for Vulnerable and is therefore likely to become at risk of extinction in the near future..

Vulnerable: A species is Vulnerable when the best available evidence indicates that it meets at least one of the five IUCN criteria for Vulnerable, indicating that the species is facing a high risk of extinction.

Endangered: A species is Endangered when the best available evidence indicates that it meets at least one of the five IUCN criteria for Endangered, indicating that the species is facing a very high risk of extinction

Critically Endangered: A species is Critically Endangered when the best available evidence indicates that it meets at least one of the five IUCN criteria for Critically Endangered, indicating the species is facing an extremely high risk of extinction.

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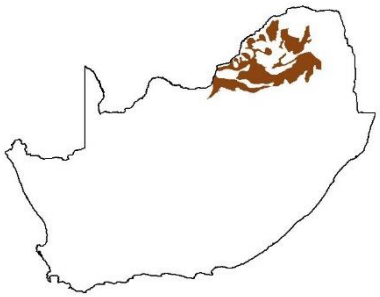
- Flora[5]: The project area falls within the Mixed Bushveld biome with the vegetation varying from a dense, short bushveld to a rather open tree savanna. On shallow soils Red Bushwillow (*Combretum apriculatum*) dominates the vegetation. Other trees and shrubs include Common Hook Thorn (*Senegalia caffra*), Sicklebush (*Dichrostachys cinerea*), Live-long (*Lannea discolor*), Marula Tree (*Sclerocarya birrea*) and various *Grewia* species. Here the grazing is sweet and the herbaceous lays is dominated by grasses such as Fingergrass (*Digitaria eriantha*), Kalahari Sand Quick (*Schmidtia pappophoroides*), Wool Grass (*Anthephora pubescens*), Bushman Grass (*Stipagrostis uniplumis*) and various *Aristida* and *Eragrostis* species.



[4] IUCN Red List of Threatened Species, *http://www.iucnredlist.org*, September 2019
[5] Vegetation of South Africa, Lesotho and Swaziland, 1996, A. Barrie Low and A. (Tony) G. Rebelo, Biome 18

On deeper and more sandy soils the Silver Clusterleaf (*Terminalia sericea*) becomes dominant, with Peeling Plane (*Ochna pulchra*), Wild Raisin (*Grewia flava*), Wheeping Wattle (*Peltophorum africanum*) and Wild Syringa (*Burkea africana*) often prominent woody species, while Broom Grass (*Eragrostis pallens*) and Purple Spike Cat'stail (*Perotis patens*) are characteristically present in the scanty grass sward.

- Heritage environment: The area has very little potential to contain microfossils, but the existing status of other heritage resources such as built structures over 60 years old, site of cultural significance associated with oral histories, burieal grounds and graves of victims of conflict and cultural landscapes and/or viewscapes are unknown.

- Socio-economic environment[1]: The project area is situated in the Blouberg Local Municipality (LIM351), which forms part of the Capricorn District Municipality in the Limpopo Province. It is a Category B municipality and the largest of four municipalities in the district, making up almost half of its geographical area. It covers an area of 9 540 km²

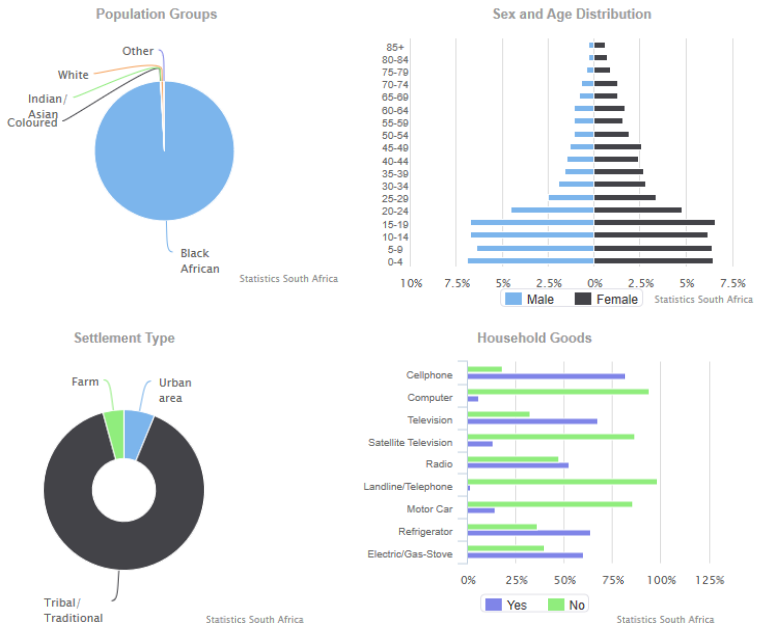
Demographic Information	**2011**
Population	162,625
Age Structure	
Population under 15	38.90%
Population 15 to 64	53.50%
Population over 65	7.60%
Dependency Ratio	
Per 100 (15-64)	86.20%
Sex Ratio	
Males per 100 females	83.8
Population Growth	
2001 to 2011	-0.54%
Population Density	
Persons per km²	18
Labour Market	
Unemployment rate (official)	39.20%
Youth unemployment rate (official) 15-34	47.20%

Education (aged 20 +)	
No schooling	28.3%
Matric	15.3%
Higher education	5.2%

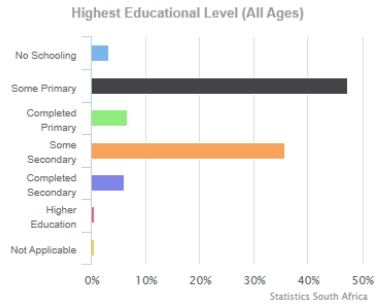
Household Dynamics	
Households	41,192
Average household size	3.8
Female headed households	56.3%
Formal dwellings	92.8%
Housing owned	58.8%
Household Services	
Flush toilet connected to sewerage	6.1%
Weekly refuse removal	20.7%
Piped water inside dwelling	7.7%
Electricity for lighting	88.0%

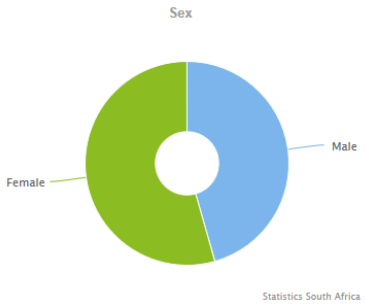
Its main economic sectors consist of agriculture, mining and tourism.

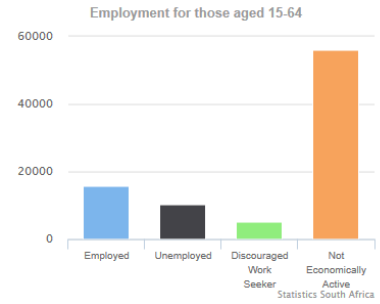
According to the last available census data, Census 2011, the Blouberg Municipality has a population of 162 600, of whom 99.3% are black African, 0.1% are colored, 0.5% are white, with other population groups making up the remaining 0.1%.

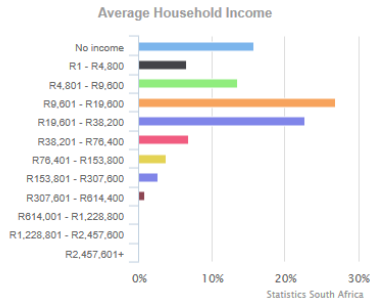


The education levels in the district are significantly low. About 28.3% of those aged between 20 years or more have either no school or only competed primary school and only 20.5% have grade ten or above. Poor education standards have resulted into high levels of unskilled labour force. This has in turn contributed to the high unemployment levels in the area (39.2%) and low wages.









Most of the area's rural employed population is employed in agriculture as farm workers and on the diamond mines. A small amount of workers find employment in the retail and light industries in the bigger sentra

- Cultural environment: Swartwater, the nearest town from the project area, is situated ±10 km away from the international border between SA and Botswana. The town and surroundings, including the project area, are within a farming community, with cattle and game as the main sources of income.

  Today Swartwater is a very small town still known as a farming commune, supplying the region with basic services and consumable needs. The majority of the people within this town and region speak Afrikaans and Ndebele, though Setswana is also spoken to a large extent. With the economy of the town driven by farming activities, and to a lesser extent diamond mining, the cultural aspect of the area can be best described as mixed culture of Afrikaans and Ndebele with specific believes and norms.

(b) Description of the current land uses[3].

A portion of the The Oaks farm is encumbered by full scale Kimberlite Diamond Mining since 1999 up to today.

Up until today limited livestock and game farming are the major land use on the project area. The latter with some crop farming can be assumed for the surrounding areas.

(c) Description of specified environmental features and infrastructure on the site.

The specified environmental features on the proposed area are:

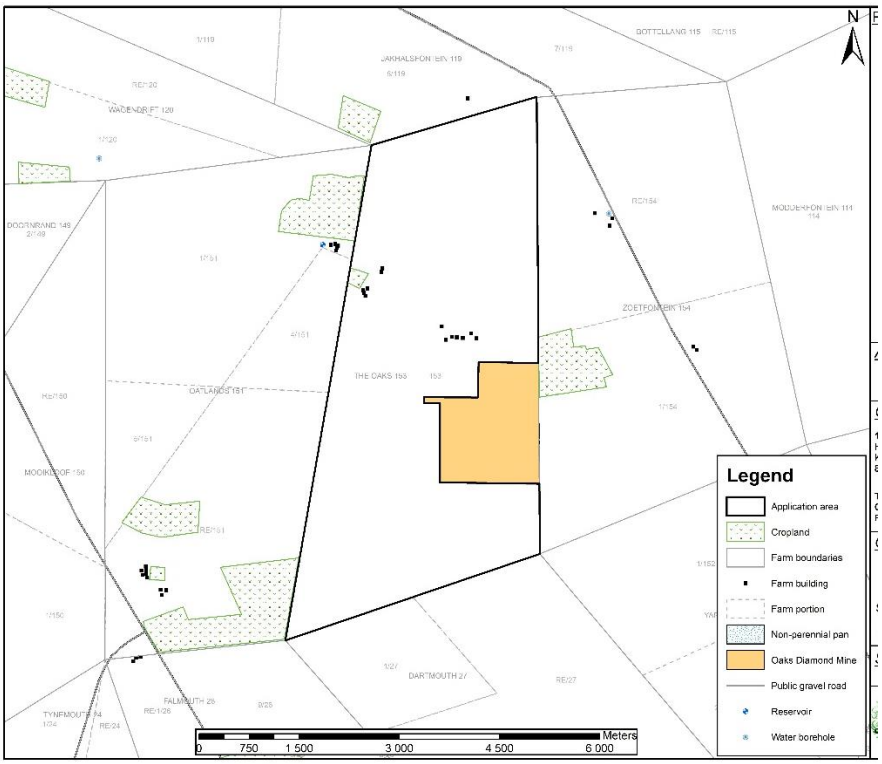
- Cropland
- Farm buildings

The specified environmental features on the surrounding area are:

- Farm buildings
- Non-perennial pans
- Public gravel road
- Reservoir
- The Oaks Diamond Mine
- Water boreholes

(d) Environmental and current land use map.

(Show all environmental and current land use features)



v) Impacts and risks identified including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts.

(Provide a list of the potential impacts identified of the activities described in the initial site layout that will be undertaken, as informed by both the typical known impacts of such activities, and as informed by the consultations with affected parties together with the significance, probability, and duration of the impacts. Please indicate the extent to which they can be reversed, the extent to which they may cause irreplaceable loss of resources, and can be avoided, managed or mitigated.)

LEGEND FOR TABLES

Se	-	Severity	D	-	Duration
SP	-	Spatial Scale	P	-	Probability
Si	-	Significance	Re	-	Reversible
IR	-	Irreplaceable Loss	Av	-	Avoidable
Ma	-	Manageable	Mi	-	Mitigatable
L	-	Low negative impact	M	-	Medium negative impact
H	-	High negative impact	Y	-	Yes
N	-	No			

- Geological

LISTED ACTIVITY	GEOLOGICAL INVESTIGATIONS										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	-	-	-	-	-	-	-	-	-	-	-
Loss or disturbance to plants	L	L	L	L	L	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	M	M	M
Water quality (storm water)	-	-	-	-	-	-	-	-	-	-	-
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	L	L	L	L	L	L	Y	N	M	M	Y
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**L**	**L**	**Y**	**N**	**M**	**M**	**M**

- Initial Drilling

LISTED ACTIVITY	DRILLING										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	L	H	L	Y	N	M	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	H	M	H	Y	N	Y	Y	Y
Loss of grazing	L	L	L	L	H	L	Y	N	M	Y	M
Loss or disturbance to plants	L	L	L	L	H	L	Y	N	M	Y	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	L	M	M	M	L	H	Y	M	Y	Y	Y
Effect on animals	L	L	L	L	M	L	Y	N	M	N	M
Water quality (storm water)	L	L	M	L	L	L	M	N	Y	N	Y
Noise	M	L	L	L	H	L	Y	N	M	N	M
Air quality	M	L	L	L	H	L	N	N	M	N	M
Archaeological items	H	H	L	H	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	L	M	N	Y	M	Y
Visual impact	L	L	L	L	M	L	Y	N	M	N	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**M**	**L**	**Y**	**N**	**M**	**M**	**M**

LISTED ACTIVITY	SAMPLING										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	L	L	L	L	L	L	Y	N	Y	Y	M
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	L	L	L	L	L	L	Y	N	Y	Y	Y
Loss or disturbance to plants	-	-	-	-	-	-	-	-	-	-	-
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	-	-	-	-	-	-	-	-	-	-	-
Water quality (storm water)	L	L	M	L	L	L	M	N	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	L	L	L	L	L	L	Y	N	Y	Y	Y
Visual impact	L	L	L	L	L	L	Y	N	Y	Y	Y
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**L**	**L**	**Y**	**N**	**Y**	**Y**	**Y**

LISTED ACTIVITY	ABLUTION FACILTY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	L	M	L	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	M	L	L	M	L	L	Y	N	Y	M	Y
Loss of grazing	L	L	L	L	L	L	Y	N	Y	M	Y
Loss or disturbance to plants	L	L	L	L	L	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	M	N	M
Water quality (Waste water)	M	H	M	H	L	M	Y	N	Y	Y	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	L	L	L	L	L	L	Y	N	Y	Y	Y
Visual impact	L	L	L	L	L	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**L**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	VEHICLE STORAGE										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	H	L	H	Y	N	Y	Y	Y
Loss of grazing	-	-	-	-	-	-	-	-	-	-	-
Loss or disturbance to plants	-	-	-	-	-	-	-	-	-	-	-
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	M	M	M
Water quality (storm water)	H	L	M	M	L	M	M	N	Y	N	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	-	-	-	-	-	-	-	-	-	-	-
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**L**	**M**	**Y**	**N**	**M**	**M**	**M**

LISTED ACTIVITY	CHEMICAL STORAGE										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	L	H	Y	N	Y	Y	Y
Loss of grazing	-	-	-	-	-	-	-	-	-	-	-
Loss or disturbance to plants	-	-	-	-	-	-	-	-	-	-	-
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	-	-	-	-	-	-	-	-	-	-	-
Water quality (storm water)	-	-	-	-	-	-	-	-	-	-	-
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	-	-	-	-	-	-	-	-	-	-	-
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**M**	**L**	**M**	**Y**	**N**	**M**	**Y**	**Y**

LISTED ACTIVITY	DIESEL STORAGE										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	L	H	Y	N	Y	Y	Y
Loss of grazing	-	-	-	-	-	-	-	-	-	-	-
Loss or disturbance to plants	-	-	-	-	-	-	-	-	-	-	-
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	N	M	M
Water quality (storm water)	M	L	M	M	L	M	M	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	M	L	L	M	L	M	M	M	Y	Y	Y
Visual impact	-	-	-	-	-	-	-	-	-	-	-
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**L**	**M**	**M**	**N**	**M**	**M**	**Y**

LISTED ACTIVITY	DOMESTIC WASTE FACILITY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	-	-	-	-	-	-	-	-	-	-	-
Loss or disturbance to plants	-	-	-	-	-	-	-	-	-	-	-
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	L	M	M	L	L	H	M	M	Y	M	Y
Effect on animals	M	L	L	M	L	M	M	M	Y	M	Y
Water quality (storm water)	-	-	-	-	-	-	-	-	-	-	-
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	L	L	L	M	L	M	Y	N	Y	Y	Y
Visual impact	L	L	L	L	L	L	Y	N	Y	Y	Y
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**M**	**L**	**M**	**Y**	**N**	**Y**	**Y**	**Y**

- Bulk Sampling

LISTED ACTIVITY	BULK SAMPLING EXCAVATIONS										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	L	Y	N	N	M	M
Operational phase											
Geological degradation	L	L	L	L	H	H	N	Y	N	N	N
Topographic change	M	L	L	M	M	M	Y	M	N	M	M
Soil pollution	H	M	L	M	M	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	H	L	Y	N	M	M	M
Loss or disturbance to plants	M	L	L	M	H	L	Y	N	M	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	L	H	M	M	L	M	Y	M	M	Y	Y
Effect on animals	M	L	L	L	M	L	Y	N	M	M	M
Water quality (storm water)	-	-	-	-	-	-	-	-	-	-	-
Noise	M	L	L	L	M	L	Y	N	M	M	M
Air quality	L	L	L	L	M	L	Y	N	M	M	M
Archaeological items	H	H	L	M	H	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	L	Y	M	Y	M	Y
Visual impact	L	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	TOPSOIL										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	L	H	L	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	M	M	L	L	H	H	Y	N	N	M	M
Soil pollution	M	L	L	M	L	M	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	L	Y	N	M	M	Y
Loss or disturbance to plants	M	L	L	L	M	L	Y	N	M	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	Y	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	L	L	M	L	L	L	M	N	Y	N	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	L	L	L	L	M	L	N	N	M	M	M
Archaeological items	H	H	L	M	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	N	Y	Y	Y
Visual impact	L	L	L	L	L	M	Y	N	N	M	N
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	OVERBURDEN										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	L	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	M	M	L	L	H	H	Y	N	N	M	M
Soil pollution	M	M	L	M	L	M	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	M	M	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	Y	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	L	L	M	L	L	L	M	N	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	L	L	L	L	M	L	N	N	M	M	M
Archaeological items	H	H	L	L	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	N	Y	M	Y
Visual impact	L	L	L	L	L	M	Y	N	N	M	N
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	STOCK PILES										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	L	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	M	M	L	L	H	H	Y	N	N	M	M
Soil pollution	M	L	L	M	L	M	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	M	Y	N	Y	M	M
Loss or disturbance to plants	M	L	L	M	M	M	Y	N	Y	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	Y	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	N	M
Water quality (storm water)	L	L	M	M	L	L	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	L	L	L	L	M	L	N	N	M	M	M
Archaeological items	H	H	L	L	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	N	Y	M	Y
Visual impact	L	L	L	L	L	M	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	WASTE DUMPS										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	M	M	L	L	H	M	Y	M	N	M	M
Soil pollution	M	L	L	M	L	M	Y	N	Y	Y	Y
Loss of grazing	M	L	L	M	M	M	Y	N	M	M	M
Loss or disturbance to plants	M	L	L	M	M	M	Y	N	M	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	L	H	M	M	L	M	Y	M	Y	Y	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	N	M
Water quality (Storm water)	L	L	M	M	L	L	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	L	L	L	L	L	L	N	N	M	M	M
Archaeological items	H	H	L	L	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	N	Y	M	Y
Visual impact	L	L	L	L	L	M	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	LOADING AND HAULING										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	L	L	M	H	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	M	Y	N	Y	Y	Y
Loss or disturbance to plants	M	L	L	M	M	M	Y	N	Y	Y	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	M	M	Y	M	Y	Y	Y
Effect on animals	M	L	L	L	H	L	Y	N	N	M	M
Water quality (Strom water)	-	-	-	-	-	-	-	-	-	-	-
Noise	M	L	L	L	H	L	Y	N	N	M	M
Air quality	M	L	L	L	H	L	N	N	M	M	M
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	M	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	OFFICE BLOCK										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	L	H	L	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	L	L	M	L	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	L	L	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	L	L	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	Y	Y
Effect on animals	L	L	L	L	M	L	Y	N	N	M	M
Water quality (waste water)	-	-	-	-	-	-	-	-	-	-	-
Noise	L	L	L	L	M	L	Y	N	N	M	M
Air quality	L	L	L	L	L	L	N	N	M	M	M
Archaeological items	H	H	L	M	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	M	L	M	N	Y	Y	M	Y
Visual impact	L	L	L	L	L	L	Y	N	N	N	N
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**M**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	PLANT SITE										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	L	L	M	H	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	M	Y	N	M	Y	Y
Loss or disturbance to plants	M	L	L	M	M	M	Y	N	M	Y	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	M	L	Y	N	N	M	N
Water quality (Storm water)	M	L	M	M	L	M	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	M	L	L	L	M	L	N	N	M	M	M
Archaeological items	H	H	L	M	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	N	Y	M	M
Visual impact	M	L	L	L	M	L	Y	N	N	N	N
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	MINERAL PROCESSING										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	-	-	-	-	-	-	-	-	-	-	-
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	M	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	L	M	M	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	L	M	M	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	M	L	Y	N	N	N	M
Water quality (waste water)	-	-	-	-	-	-	-	-	-	-	-
Noise	M	L	L	L	M	L	Y	N	N	M	M
Air quality	M	L	L	L	H	L	N	N	M	M	M
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	L	L	L	L	H	L	Y	N	N	N	N
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**M**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	ABLUTION										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	L	H	L	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	M	L	L	M	L	L	Y	N	Y	M	Y
Loss of grazing	M	L	L	L	M	L	Y	N	M	Y	Y
Loss or disturbance to plants	M	L	L	L	M	L	Y	N	M	Y	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (waste water)	M	H	M	H	L	M	Y	N	N	M	N
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	H	H	L	L	L	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	L	M	Y	M	Y	M	Y
Visual impact	L	L	L	L	L	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**L**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	VEHICLE PARKING LOT										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	M	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	H	M	Y	M	Y	Y	Y
Loss or disturbance to plants	M	L	L	M	H	M	Y	M	Y	Y	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	M	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	M	L	M	M	L	M	M	M	Y	M	Y
Noise	L	L	L	L	L	L	Y	N	N	M	M
Air quality	M	L	L	L	M	L	N	N	Y	M	M
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	L	M	Y	M	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	WASH BAY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	M	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	M	M	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	M	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	M	L	Y	N	N	M	M
Water quality (waste water)	H	H	L	M	H	H	M	M	N	M	M
Noise	M	L	L	L	M	L	N	N	N	M	M
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	N	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	PARTS STORE ROOM										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	H	L	M	L	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	L	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	M	L	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	L	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	M	L	M	L	L	M	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	M	L	L	L	L	L	N	N	M	N	Y
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**M**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	TEMPORARY WORKSHOP FACILITY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	M	L	M	H	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	M	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	M	M	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	M	L	Y	N	N	M	M
Water quality (waste water)	H	H	L	M	H	H	Y	M	M	Y	Y
Noise	M	L	L	L	M	L	Y	N	M	M	M
Air quality	L	L	L	L	L	L	N	N	Y	M	Y
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	H	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	N	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	STORAGE FACILITY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	H	L	M	M	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	L	L	Y	M	Y	M	Y
Loss or disturbance to plants	M	L	L	M	L	L	Y	M	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	M	L	M	M	L	L	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	M	L	L	L	L	L	N	N	Y	M	M
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	L	L	Y	N	N	N	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	DIESEL STORAGE										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	H	L	M	H	H	Y	M	Y	Y	Y
Loss of grazing	M	L	L	M	H	M	Y	M	Y	M	Y
Loss or disturbance to plants	M	L	L	M	H	M	Y	M	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	L	M	Y	M	Y	M	Y
Effect on animals	M	L	L	L	M	L	Y	N	N	M	M
Water quality (Storm water)	H	H	M	M	L	H	M	M	Y	M	Y
Noise	M	L	L	L	M	L	Y	N	N	M	M
Air quality	M	L	L	L	M	L	N	N	M	M	M
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	H	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

LISTED ACTIVITY	DOMESTIC WASTE FACILITY										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	L	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Litter pollution	M	L	L	M	M	L	Y	N	Y	Y	Y
Loss of grazing	M	L	L	M	M	L	Y	N	Y	M	Y
Loss or disturbance to plants	M	L	L	M	M	L	Y	N	Y	M	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	M	L	L	M	M	M	M	M	Y	Y	Y
Water quality (Storm water)	M	L	L	L	L	M	Y	N	Y	Y	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	L	L	L	L	L	L	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	M	L	L	L	M	L	Y	N	N	Y	M

LISTED ACTIVITY	POWER LINES										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	L	M	L	Y	N	N	Y	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	L	L	L	L	M	L	Y	N	Y	Y	Y
Loss or disturbance to plants	L	L	L	L	M	L	Y	N	Y	Y	Y
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	N	M	M
Water quality (Storm water)	-	-	-	-	-	-	-	-	-	-	-
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	-	-	-	-	-	-	-	-	-	-	-
Visual impact	-	-	-	-	-	-	-	-	-	-	-
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation											
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**M**	**L**	**Y**	**N**	**N**	**Y**	**M**

LISTED ACTIVITY	SECURITY POINTS										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	N	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	H	L	L	M	M	H	Y	M	M	Y	Y
Loss of grazing	M	L	L	M	M	M	Y	M	M	M	M
Loss or disturbance to plants	M	L	L	M	M	M	Y	M	M	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	M	H	M	M	H	M	M	M	M	M	M
Effect on animals	M	L	L	L	L	L	Y	N	N	N	N
Water quality (Storm water))	M	L	M	M	M	M	Y	M	Y	M	Y
Noise	M	L	L	L	M	L	Y	N	N	N	M
Air quality	M	L	L	L	M	L	N	N	M	M	M
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	M	L	L	L	M	M	Y	N	Y	M	Y
Visual impact	M	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**L**	**M**	**L**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	STORM WATER CONTROL										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	L	L	L	M	H	L	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	L	L	L	L	M	M	Y	N	N	M	M
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	L	L	L	L	L	L	Y	N	M	M	M
Loss or disturbance to plants	L	L	L	L	L	L	Y	N	M	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	L	L	L	L	L	L	Y	N	N	N	N
Water quality (Storm water)	POSITIVE										
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	-	-	-	-	-	-	-	-	-	-	-
Archaeological items	-	-	-	-	-	-	-	-	-	-	-
Sensitive landscapes	M	L	L	L	M	M	Y	N	M	M	Y
Visual impact	-	-	-	-	-	-	-	-	-	-	-
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**L**	**L**	**L**	**L**	**M**	**M**	**Y**	**N**	**N**	**M**	**M**

LISTED ACTIVITY	ACCESS AND HAULING ROADS										
	Se	D	SP	C	P	Si	Re	IL	Av	Ma	Mi
Construction phase											
Loss of vegetation	M	L	L	M	H	M	Y	M	N	M	M
Operational phase											
Geological degradation	-	-	-	-	-	-	-	-	-	-	-
Topographic change	-	-	-	-	-	-	-	-	-	-	-
Soil pollution	-	-	-	-	-	-	-	-	-	-	-
Loss of grazing	M	L	L	M	M	M	Y	M	Y	M	M
Loss or disturbance to plants	M	L	L	M	M	M	Y	M	Y	M	M
Depressed water table	-	-	-	-	-	-	-	-	-	-	-
Problem plant invasion	-	-	-	-	-	-	-	-	-	-	-
Effect on animals	M	L	L	L	L	L	Y	N	N	N	M
Water quality (Storm water)	M	L	M	M	L	M	Y	M	Y	M	Y
Noise	-	-	-	-	-	-	-	-	-	-	-
Air quality	M	L	L	L	L	L	N	N	Y	M	M
Archaeological items	H	H	L	L	M	H	N	Y	Y	N	Y
Sensitive landscapes	M	L	L	L	M	M	Y	N	M	M	M
Visual impact	L	L	L	L	M	L	Y	N	N	M	M
Decommissioning phase											
Waste disposal	POSITIVE										
Re-vegetation	POSITIVE										
After closure phase											
Rehabilitation of exposed areas	POSITIVE										
Safety risks	POSITIVE										
Total Environment	**M**	**L**	**L**	**M**	**H**	**M**	**Y**	**M**	**N**	**M**	**M**

vi) Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;

(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process were determined in order to decide the extent to which the initial site layout needs revision.)

Methodology used in determining and ranking the nature of the possible impacts caused by the proposed listed activities includes:

- Field visit to assess the environment and surrounding features
- Identify all mining and mining related activities of the proposed project.
- All identified activities are analyzed and potential impacts identified per activity.
- Using specific impact criteria to determine the significance, consequence, extent duration and probability of each identified impact per activity.

The preceding list of identified impacts is evaluated in terms of the following criteria:

SEVERITY

- Low negative impact (indicates a state of 'calmness' concluding that the effect the operations may have on the environment is so insignificant that the wellbeing of the environment or any individual will not be degraded or prohibited.)

- Medium negative impact (describes as state of 'manageable stress', giving the idea of that the effect of the operations on the environment is significant enough to cause tolerable disturbance to the wellbeing or overall conditions of the environment or any individual.)

- High negative impact (indicating a state of 'high stress', meaning that the effect of the operations on the environment is so significant that the wellbeing and overall conditions of the environment or any individual will be degraded or prohibited.)

DURATION	- Short-term (short-term duration is rated as a period less than two years and indicated as a low impact.) - Medium-term (medium-term impact is rated as the period between 2 and 5 years and indicated as a medium impact.) - Long-term (long term impact is rated as the any period exceeding 5 years and indicated as a high impact.)
SPATIAL SCALE	- Localized (the disturbance occurs within a radius of 500 m from point of existence and indicated as low impact) - Fairly widespread (the disturbance is carried over a short distance, between 500 m and 1 km radius from point of existence and indicated as medium impact) - Widespread (disturbance exercise a negative affect over an area greater than 1 km radius from point of existence and indicated as high impact.)
CONSEQUENCE	- Low consequence (meaning that the probability of cumulative impact occurrence is minimal with little to no lasting effects and is indicated as low impact) - Medium consequence (meaning that the probability of cumulative impact occurring exists with a moderate, short-term lasting effect and is indicated as medium impact.) - High consequence (meaning that the probability of cumulative impact occurrence is absolute with a short to medium-term lasting effect and indicated as high impact)
SIGNIFICANCE	- Low overall significance (the disturbance caused by the impact is minimal with an excellent probability for total recovery after operations ceased.)

	- Medium overall significance (the disturbance caused by the impact is moderate with a good chance for total recovery over an intermediate period after operations ceased.) - High overall significance (the disturbance caused by the impact is severe with a poor to no probability for recovery after operations ceased.).
Reversible	- Yes (the effects of disturbance can be reversed and the area rehabilitated) - Moderately (the effects of disturbance can be reversed in some extent in order for environmental risk to be minimal.) - No (the effects of disturbance cannot be reversed.)
Irreplaceable loss	- No (resources / environmental features lost due to the proposed activities can be replaced through either human intervention and/or natural processes within a relatively short period of time.) - Moderately (resources / environmental features lost due to the proposed activities can be replaced through either human intervention and/or natural processes over a period of time.) - Yes (resources / environmental features lost due to the proposed activities cannot be replaced through either human intervention and/or natural processes.)
Avoided	- Yes (the impact can be avoided through strict management and mitigation measures.) - Moderately (the impact can be avoided to some extent through strict management and mitigation measures) - No (the impact cannot be avoided to some extent through strict management and mitigation measures.)

Managed	- Yes (the impact can be managed to almost nullify / eliminate the effect the impact may have on the environment.) - Moderately (the impact can be managed to such an extent that the effect of the environment is minimized.) - No (the impact cannot be managed, but the activity must rather be mitigated to minimize the impact of the activity)
Mitigated	- Yes (the activity can be mitigated to minimize the probability of the impact to occur.) - Moderately (the activity can be mitigated to minimize the severity/significance the impact have on the environment.) - No (the activity cannot be mitigated to minimize the probability of the impact occurring and/or minimize the severity/significance of the impact.)

vii) The positive and negative impacts that the proposed activity (in terms of the initial site layout) and alternatives will have on the environment and the community that may be affected.

(Provide a discussion in terms of advantages and disadvantages of the initial site layout compared to alternative layout options to accommodate concerns raised by affected parties)

The proposed mining operations and current proposed site plan shows to have an overall low to medium negative impact on the property. Some of the prospecting related features and structures were planned with due consideration toward features existing and the sensitivity of the environment on the proposed property. Any significant alterations to the site layout or prospecting and prospecting related activities will not result in a lesser significant impact on the environment, but implementation of mitigation, management and/or avoidance measures will result in lesser significant impact or prevent the impact from occurring.

The farm owner and ongoing farming activities will be moderately influenced by the prospecting operations in regard to noise, air quality loss as well as the loss in grazing field. After considering alternative processes and site layout, these alterations did not proof any significant minimization of the impacts. It is rather recommended that more strict implementation and adherence to the mitigation measures are followed.

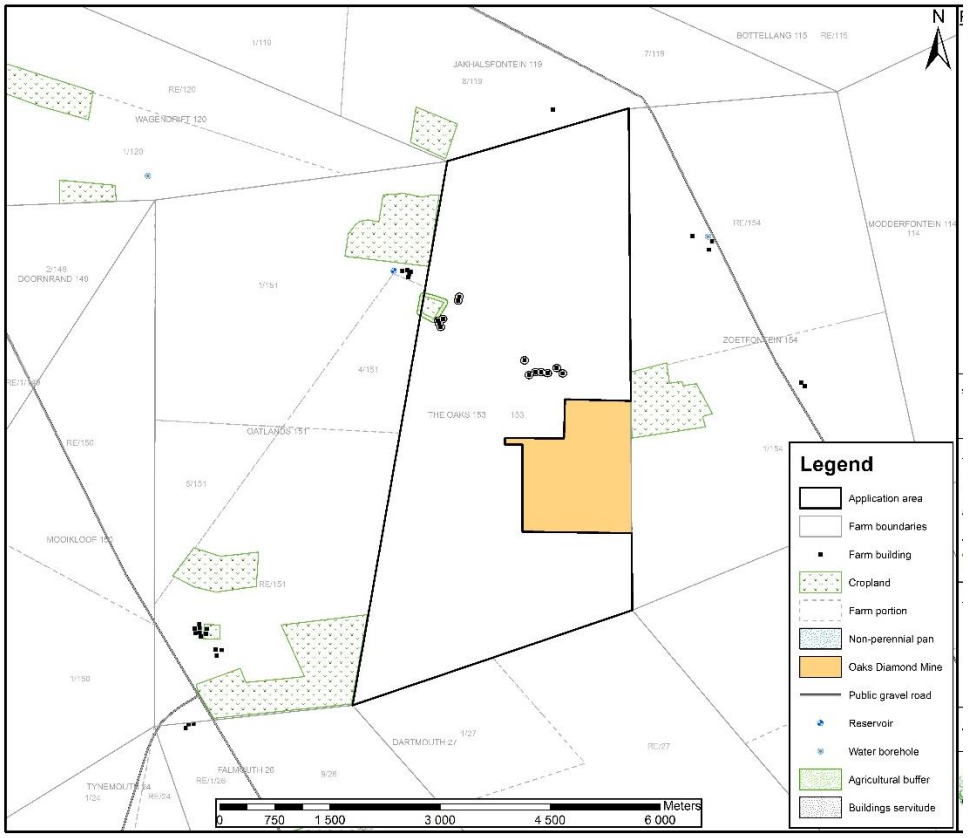
viii) The possible mitigation measures that could be applied and the level of risk.

(With regard to the issues and concerns raised by affected parties provide a list of the issues raised and an assessment/discussion of the mitigation or site layout alternatives available to accommodate or address their concerns, together with an assessment of the impacts or risks associated with the mitigation alternatives considered.)

Several environmental significant sites and features occurs within the area which will need avoidance:

- Farm buildings: Any prospecting and/or prospecting related activities must stay at least 50 m clear from any farmstead fence or farm infrastructure demarcated area.

- Cropland: Any prospecting and/or prospecting related activities must stay at least 20 m clear from any irrigation or crop land.



ix) Motivation where no alternative sites were considered.

Alteration in the prospecting processes and site plan were considered, but ruled out during the early stages of the planning due to the following:

- Alterations to the proposed prospecting processes and site plan proofed not to have any lesser effect on the environment.

- The cost effectiveness of the operation is of great importance and should any structure or related activity be replaced with an alternative, the cost implicated may result in unsuccessful prospecting operations

- The locality of the project area is very rural and should the office sites be relocated to town rather than being on the project area itself the traveling distance may halter the cost effectiveness of the project as well as productivity due to the absence of management personnel during the activities.

- The current site layout and prospecting processes proposed for this operation proof to be the best possible option and layout with the minimal negative impacts in regard to the biophysical, socio-economic and cultural environment.

x) Statement motivating the alternative development location within the overall site. (Provide a statement motivating the final site layout that is proposed)

As detailed in Part A Section 1(g)(vii, viii and ix) of this document no alternative developments towards the prospecting processes and site plan are considered and will be kept as originally proposed due to that any alterations proof not to significantly minimize impacts, but rather implementation of mitigation, management and/or avoidance measures with the absolute strict adherence thereof must be done.

h) **Full description of the process undertaken to identify, assess and rank the impacts and risks the activity will impose on the preferred site (In respect of the final site layout plan) through the life of the activity.**

(Including (i) a description of all environmental issues and risks that were identified during the environmental impact assessment process and (ii) an assessment of the significance of each issue and risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures.)

The process of identifying, assess and rank the impacts and risks that may result from the activities is done firstly through looking at every aspect of the specific activity and the threat is poses. All Activities are assessed against possible vegetation loss, topographic change, soil pollution, depressed water table, invader plant establishment, migration of animals, loss of water quality, noise and dust generation, destruction of possible archaeological and sensitive landscapes as well as waste disposal and area rehabilitation/re-establishment.

The assessment of impacts are done as a low, medium or high rankings. These rankings are given for several factors, which will conclude into a final ranking. These factors include the Severity of the impact, Duration of impact, Spatial scale of impact, Consequence of Impact and the Probability of Impact occurring.

The final ranking, the Significance of an impact, is concluded from the above factors giving an indication of the probability of total recovery after operations ceased. The rehabilitation of the environment during and/or after operations have a positive effect on the impact significance.

i) **Assessment of each identified potentially significant impact and risk.**

(This section of the report must consider all the known typical impacts of each of the activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered interested and affected parties).

ACTIVITY Whether listed or not listed. (E.g. Excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyers, etc...etc...etc.)	**POTENTIAL IMPACT** (E.g. dusts, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc...etc.)	**ASPECTS AFFECTED**	**PHASE** In which impact is anticipated. (E.g. Construction, commissioning, operational, decommissioning, closure, post-closure.)	**SIGNIFICANCE** If not mitigated	**MITIGATION TYPE** (modify, remedy, control, or stop) Through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc...etc. E.g. Modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation....	**SIGNIFICANCE** If mitigated
Geological Investigation	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna	Migration		Low	Noise level control Waste management	Low
	Water quality	Loss		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		-	-	Positive

	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
INITIAL DRILLING						
Drilling	Vegetation	Loss	Construction	Low	Vegetation clearing control Rehabilitation	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Rehabilitation Soil pollution control Chemical handling protocol	Medium
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		High	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		Low	Stormwater control	Low
	Noise	Elevated levels		Low	Noise level control Operational hours	Low
	Air quality	Degradation		Low	Dust control	Low
	Archaeological items	Loss		High	Avoid identified heritage site/s	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Sampling	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Low	Rehabilitation	Low
	Soil	Pollution		-	-	-

	Grazing	Loss		Low	Vegetation clearing control Rehabilitation	Low
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			-	-	-
	Water quality	Storm water		Low	Stormwater control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Ablution	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		Low	Facility maintenance Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Waste water		Medium	Waste water management Regular septic tank draining	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low

	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Vehicle storage	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Medium
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Chemical storage	Vegetation	Loss	Construction	-	-	-
	Geological loss	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker bay installation Chemical handling protocol	Low
	Grazing	Loss		-	-	-

	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna	Migration		-	-	-
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Diesel storage	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Medium
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna	Migration		Low	-	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		High	Regular inspection	Positive

	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Domestic Waste Facility	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil / Litter	Pollution		-	-	-
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		High	Regular removal Report to environmental officer	Low
	Fauna			Medium	Adhere to mitigation measures Immediate clean-up Fencing of site	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive site Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Waste management Litter pollution management Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
BULK SAMPLING						
Bulk sample excavations	Vegetation	Loss	Construction	Low	Vegetation clearing control Restriction to roads	Low
	Geological	Loss	Operational	High	-	High
	Topographic	Change		Medium	Rehabilitation	Low

	Soil	Pollution		High	Immediate rehabilitation Continuous inspections Vehicle maintenance	Medium
	Grazing	Loss		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Damping of mine roads Speed restrictions	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Low	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Topsoil	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low

	Soil	Pollution		Medium	Rehabilitation Continuous inspections	Low
	Grazing	Loss		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspection Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Protect against wind erosion	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Overburden	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low
	Soil	Pollution		Medium	Rehabilitation Regular inspections	Low

	Grazing	Loss		Low	Rehabilitation Traffic restriction to cleared areas Vegetation clearing control	Low
	Vegetation	Loss/disturbance		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Protect against wind erosion	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Stock piles	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low
	Soil	Pollution		Medium	Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to cleared areas	Low

	Vegetation	Loss/disturbance		Medium	Vegetation clearing control Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna	Migration		Low	-	Low
	Water quality	Loss		Low	Storm water control	Low
	Noise	Elevated levels		Low	Operations within office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of mine roads	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscapes	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Waste dumps	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Medium	Rehabilitation	Low
	Soil	Pollution		Medium	Immediate rehabilitation Continuous inspections	Low
	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Vegetation clearing control Rehabilitation	Low

	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Regular inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		Low	Operations within office hours Silencer systems on vehicles	Low
	Air quality	Loss		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscapes	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Loading and hauling	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Vehicle maintenance	Medium
	Grazing	Loss		Medium	Restriction to roads Continuous rehabilitation	Low
	Vegetation	Loss/disturbance		Medium	Restriction to mine roads Continuous rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspection Reporting to environmental officer	Low

	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Speed restriction	Low
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Speed restrictions Minimal traffic possible	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Office block	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Traffic restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Traffic restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna			Low	Waste management	Low
	Water quality	Waste water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas Speed restriction	Low
	Archaeological items	Loss		High	Avoid sites of significance	-

	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Plant site	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Machine maintenance Immediate rehabilitation Regular inspection Chemical handling control	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Reporting to environmental officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low

	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Mineral processing	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Vehicle maintenance Immediate rehabilitation Regular inspections Chemical control handling	Medium
	Grazing	Loss		Medium	Restriction to cleared areas Rehabilitation	Low
	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Waste water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of exposed areas Speed restriction Spraying systems on conveyors	Low
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Dust control	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive

	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Ablution	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		Low	Facility maintenance Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Waste water		Medium	Wastewater management Regular septic tank draining	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Vehicle parking lot	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-

	Soil	Pollution		High	Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna			Low	Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		Low	Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of cleared areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Wash-bay	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Medium
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low

	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	Operations within office hours Waste management	Low
	Water quality	Waste water		High	Waste water management Draining/cleaning of waste water Biodegradable detergents	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Parts storeroom	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Low
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	-	Low

	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Temporary workshop facility	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	Operations within office hours Waste management	Low
	Water quality	Waste water		High	Waste water management Draining/cleaning of waste water	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-

	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Storage Facility	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker bay installation Chemical handling protocol	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	Operations within office hours Waste management	Low
	Water quality	Waste water		Low	Waste water management Draining/cleaning of wastewater Stormwater control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-

	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Diesel storage	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna	Migration		Low	-	Low
	Water quality	Storm water		High	Storm water control Soil pollution management	Medium
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	-
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		High	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

Domestic Waste Facility	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil / Litter	Pollution		Low	Immediate clean-up Continuous inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Medium	Adhere to mitigation measures Immediate clean-up Fencing of site	Low
	Water quality	Storm water		Medium	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive site Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Waste management Litter pollution management Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Power lines	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low

	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna	Migration		Low	-	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Security points	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Littering control	Low
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		-	-	-

	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Storm water control	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Medium	Rehabilitation	Low
	Soil	Pollution		-	-	-
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	-	Low
	Water quality	Storm water		Positive	-	Positive
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Access and Hauling roads	Vegetation	Loss	Construction	Medium	Vegetation clearing control Minimum roads possible	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-

	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to roads	Low
	Vegetation	Loss/disturbance		Medium	Restrictions to roads Rehabilitation Vegetation clearing control	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	-	Low
	Water quality	Storm water		Medium	Storm water control Erosion control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of roads	Low
	Archaeological items	Loss		High	Restriction to roads Avoid significant sites	Low
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

j) **Summary of specialist reports.**

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form:).

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE EIA REPORT. (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED.
No specialist studies and Reports were done as this document is a revision of the Approved Environmental Impact Assessment / Environmental Management Programme Report. The majority of the data could be derived from the Approved document and the EAP did not foresee the necessity for the conduction of the various Specialist studies.			

Attach copies of Specialist Reports as appendices

k) **Environmental impact statement**

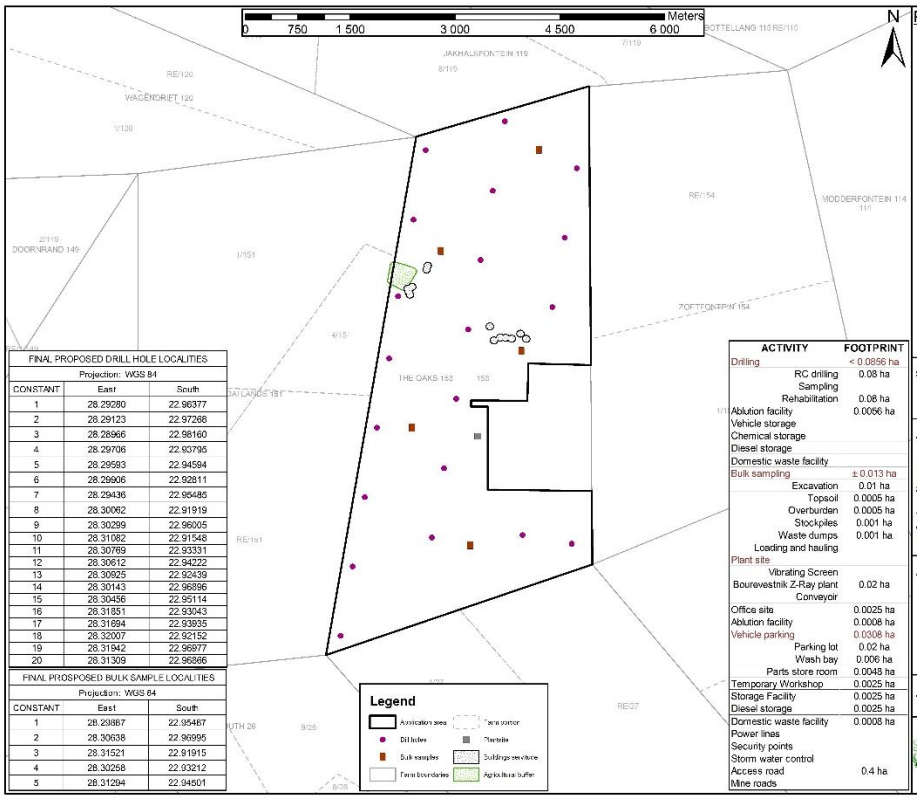
(i) Summary of the key findings of the environmental impacts assessment;

During the conduction of the Environmental Impact Assessment several key elements regarding the proposed project came under attention:

- With due consideration toward the negative impact the prospecting activities pose on the environment with the knowledge of the current status of the environment, it can be concluded that the prospecting activities may have some minor negative impacts on the area.

(ii) Final Site Map

Provide a map at an appropriate scale which superimposes overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. Attach as **Appendix**



(iii) Summary of the positive and negative implications and risks of the proposed activity and identified alternatives;

Throughout the document the focus point was to identify and assess the negative impacts the proposed operations may have on the bio-physical, socio-economic and cultural environment. The major negative influences the proposed operations may pose are noise disturbance, alleviated dust levels and vegetation loss.

The prospecting of the area will have a positive effect on the socio-economic environment through some job creation and, should the area proof feasible and mine development occurs, social upliftment.

l) **Proposed impact management objectives and the impact management outcomes for inclusion in the EMPr;**

Based on the assessment and where applicable the recommendations from the specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorization.

The proposed impact management objective is to create environmental sustainable prospecting operation by the management, remediation or elimination of environmental impacts through the implementation and adherence of mitigation measures as legislatively required.

The above mentioned outcomes can be achieved through the implementation of the following impact specified objectives and their outcomes. The management action will be subjected to the Mineral and Petroleum Resources Act, Act 28 of 2002 (amended 2008), Mine Health and Safety Act, Act 29 of 1996 (amended 1997 and 2008), National Water Act, Act 36 of 1998, National Environmental Management Waste Act, Act 59 of 2008 (amended 2014), National Environmental Biodiversity Act, Act 10 of 2004, National Environmental Management Act, Act 107 of 1998 and Environmental Impact Assessment Regulations, 2014 (amended 2017).

The significant impacts as identified in Section A.1(g)(v) and Section A.1(h)(i), will be managed during the construction and operational phases as follows:

- Geology:
  - All residue material will be backfilled into the open pits back to their original depth
  - The subsoil, topsoil and growth medium will be backfilled separately.

- Topography: the expected post topography after closure will be very close to pre-prospected conditions. No dumps or stockpiles will be left.
  - All the excavated material will be backfilled into the open pits as to reflect a pre-prospected topography. No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.
  - All excavated material will be used to backfill the open pits up to the original topographical height.
  - Sampling and analysis of the growth medium stockpiles will be done during rehabilitation and if necessary, soil amelioration will be done. Compacted areas will be ripped and leveled in order to re-establish a growth medium
  - All temporary structures like the plant, containers and topsoil stockpiling will be removed during the decommissioning phase, the area ripped to a depth of 300 mm and the topsoil returned to its original depth to provide a growth medium
  - No development of temporary or permanent infrastructure will be allowed within the 100 year floodline of any major and perennial drainage channels
  - All waste rock will be removed on an ongoing basis.

- Soils:
  - In all places the first 300 mm of loose or weathered material found, even at areas of bedrock outcrop, will be classified as a growth medium
  - In all areas where the above growth medium will be impacted on, it will be removed and safeguarded near to each open pit or in the area. The maximum height of any dumps will be 2.5 meters.
  - The first 300 mm of growth medium, the topsoil and then the subsoil will be stockpiled separately as to prevent the destruction of the natural soil profile for each area
  - The growth medium/topsoil will be used during the rehabilitation of any impacted areas, after sloping to 18° or less, in order to re-establish the same land capability. No rectification of topsoil is expected, as no soil should be contaminated during prospecting
  - If any soil is contaminated during operations or during closure, it will be removed together with the contaminant and placed in acceptable containers to be removed with the industrial waste to a recognized facility or company. No contaminated soil will be treated on site.
  - Sampling and analysis of selected topsoil areas will again be done after rehabilitation to determine if soil amelioration (cultivation) will be necessary
  - Erosion control in the form of revegetation and contouring of slopes will be implemented on prospected areas and where found necessary during the rehabilitation of the prospected areas.
  - On all new areas of infrastructure development, including access roads, the growth medium will be removed and stockpiled for rehabilitation purposes.
  - Where the soil is compacted it will be ripped to a depth of 300 mm and leveled in order to re-establish a growth medium
  - Topsoil will be replaced immediately (within 14 days) on an area when backfilling is completed
  - Vehicle movement will be confined to established roads (no braiding of roads allowed) as to prevent the disturbance and compaction of soils.
  - Temporary and permanent drainage works to prevent soil erosion with mitigation measures where erosion is found will be established.
  - All the pollution control measures to prevent soil pollution as described within this document will be enforced.

- Land capability: the expected land capability after project closure is grazing for the whole prospected area.
  - All management actions will be directed to prevent any change in the land capability by limiting all unnecessary surface disturbances. Prospecting activities will only take place within the designated area of each site.
  - The open pits will be subjected to progressive backfilling and no permanent waste dumps will be established or left of surface. All structures (dumps or waste material) will be removed down to the natural surface area.

- Final rehabilitation, through a process of reclamation, reseeding and the removal of erosion gullies and invader plants, will result in the restoration of the prospected- and impacted areas land capability.

- Vegetation:
  - The plant- and backfilled areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. If this is not found to be feasible during rehabilitation a general seed mixture as provided by Eco-Rehab of Potchefstroom University, will be used
  - Management will also take responsibility to control declared invader or exotic species on the rehabilitated areas. The following control methods will be used.
    - The plants will be uprooted, felled or cut off and can be destroyed completely.
    - The plants will be treated with an herbicide that is registered for use in connection therewith and in accordance with the directions for the use of such an herbicide.

  - Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion
  - All new vegetated areas will be protected against grazing cattle, sheep or goats.
  - The end objective of the revegetation program will be to achieve a stable self-sustaining habitat unit
  - Vegetation on flat surfaces will be stablished using the dry lands technique requiring no irrigation
  - Monitoring of the rehabilitation area will take place every six months until project closure by using a wheelpoint apparatus. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. Photos will be taken at fixed points and included in the three monthly decommissioning reports.
  - Valid permits from the Limpopo Nature Conservation will be obtained before any protected plant species are removed. On removal of these species will a co-ordinated be logged and mapped. Once the area has been rehabilitated seedlings of these species will be replanted on that specific point and growth monitored.
  - All workers of this site will have strict instruction that any collection of wood for fire is not allowed except where provided for by management.
  - No vegetation nearer than 20 m to the riverbank will be removed (Agricultural Resources Act, Act 43 of 1983)

- Fauna:
  - Any form of poaching by workers on the project area will result in the maximum form of punishment as allowed for by common law. Any form of snares or traps will be removed.
  - As rehabilitation proceeds over prospected areas security fences will be removed to allow more freedom of movement to the fauna over the sites.

- All open pits will be backfilled to such a degree as to prevent any animals from falling into a depression. Operation pits will have a low angle access ramp to provide an escape route for animals.
- If species diversity does not reflect the surrounding area after closure, suitable action will be taken if deemed necessary by the Department of Nature Conservation
- If any endangered species are encountered at least two of the Nature Conservation Departments will be contacted and informed of the animal/s encountered and its current stat and whereabouts.

- Surface water:
  - Water balance
    - Monitoring of water quality in the nearest boreholes will be done on a three monthly basis.
    - Construction of functional wastewater management systems to prevent groundwater pollution will be done if monitoring indicates the need
    - The mine will maintain a 0.8 m freeboard on all water management features
    - Obtain statutory compliance with DWS on all surface water features such as storing of water, disposing and diverting of storm water.

  - Storm water
    - A clean water system consisting of a berm (2 m wide and 1 m high) around the prospecting and prospecting related activity areas will be constructed. This system will be able to divert run-off from the peak precipitation event around these areas.
    - Any vehicle repairs will be only take place within the workshop / service bay area and all waste products will be disposed in appropriate containers found inside this facility
    - Any repairs in the open pits will be limited to emergency repairs with drip pans and trays
    - All refueling will only take place in the demarcated area for such activity. If this is found not to be feasible drip pans will be used whenever refueling takes place.
    - The mine institute civil works in all areas where dirty water is produced and separate this water from the clean water systems
    - All infrastructures will be properly designed to allow for proper drainage and run-off without resulting in erosion features
    - These structures and one like, trenches and embankments will be inspected and evaluated at monthly intervals and after a storm event. These structures will be maintained through regular silt removal and the removal of aquatic weeds and reeds
    - No pollution control features like a steeling dam will be constructed within the 100 m floodline area.

- Surface rehabilitation
  - All compacted areas will be ripped and leveled in order to re-establish a growth medium. This will be done as so to prevent erosion on slopes.
  - Flow patterns will be re-constructed in such a way that surface water flow is towards the natural drainage area. The damming up of run-off water will not be allowed.
  - Monitoring of the above areas for signs of erosion will take place at monthly intervals and after any storm event. If any erosion is noted remedial action to prevent any further degradation will be taken and the erosion features will be rehabilitated immediately

- Surface water users
  - No wastewater or seepage water from workings will be allowed to enter a natural water course

- Ground water:
  - Surface rehabilitation
    - Care will be taken that a stable and self-sustaining rehabilitated surface is created and surface impact be minimized
    - The maintenance of vehicles and equipment used for any purpose during the prospecting operation will only take place within the maintenance yard or service area
    - If any equipment or vehicles break down inside the pits or outside the maintenance yard the following emergency procedures will be followed:
      - Drip pans will be placed at all point where diesel, oil or any hydraulic fluid can drip and contaminate the soil.
      - All effort will be made to remove the vehicle or equipment to the maintenance yard or service area.
      - If the vehicle or equipment cannot be removed the broken part will be drained of all fluids and the specific part removed to the service area.
      - No repairs will be allowed to take place outside to take place outside the maintenance yard or service area.

    - Equipment used in the processing plant operation will be adequately maintained, so that during operation they do not spill oil, diesel, grease or hydraulic fluid that could contaminate groundwater resources.
    - All the pollution control measures as described within this document will be implemented and monitored on a monthly basis to determine if they are functioning correctly. If evidence of uncontained pollution is detected remedial action as described under the relevant Sections in this EIA/EMPr will be taken.

- Legitimate ground water users
  - All boreholes identified will be monitored on a six monthly basis with regard to their respective water levels
  - The full legal requirement aimed at the protection of water resources, as described in the Operational Guideline Document from DWS , will be followed and complied with
  - Maintaining a clean- and dirty water system and operating waste sites according the DWS minimum requirements, will protect the right of the surrounding surface owners to clean ground- and surface water.

- Air quality:
  - All roads will be sprayed with water or an environmentally friendly dust-allaying agent that contains no PCB's (e.g. DAS products) at regular intervals to ensure that dust is adequately suppressed on the prospecting and prospecting related areas.
  - Dust suppression by means of a water sprayer or with a DAS product like Hydro Plus, will be installed at the primary feeder bin at the plant if any complaints from the public is received.
  - The surface area and machinery of the plant will be regularly cleaned to prevent the accumulation of dust. Extraction systems with dust filters will be installed in the plant if monitoring indicates the need.
  - All disturbed or exposed areas will be revegetated as soon as possible during prospecting to prevent any dust source from being created.
  - A fall-out and nuisance dust monitoring programme will be submitted to the Principle Inspector of Mines and Environmental Management (DMR-Kimberley) on a six monthly basis. The baseline data that have been collected during the baseline and approved EIA/EMPr investigation will be used as a point of reference.
  - If complaints are received from the public or State Department regarding dust levels, the fall-out and nuisance dust levels will again be monitored at prescribed monitoring points. The results will then be compiled into monthly reports and forwarded to the Director of Mine Health and Safety at the DMR: Kimberley.

- Noise
  - The management objective will be to reduce any level of noise, shock and lighting that may have an effect on persons or animals, both inside the project area and that which may migrate outside the project area
  - When the equivalent noise exposure, as defined in the South African Bureau of Standards Code of Practice for the Measurement and Assessment of Occupational Noise for Hearing Conservation Purposes, SABS 083 as amended, in any place at or in any mine or works where persons may travel or work, exceeds 82 dB, the site manager will take the necessary steps to reduce the noise below this level.
  - Hearing protection will be available for all employees where attenuation cannot be implemented

- If any complaints are received from the public or state department regarding noise levels the levels will be monitored at the monitoring points as described within this document. The result will be compared to current monitoring levels and a report forwarded to the Director of Mine Health and Safety, DMR: Kimberley.
- If monitoring indicates excessive noise levels from the reverse safety alarms of prospecting vehicles are noticeable in any residential area, these vehicles will be fitted with reverse rotating safety lights.
- Mechanical equipment
  - All mechanical equipment will be in good working order and vehicles will adhere to the relevant noise requirements of the Road Traffic Act.
  - All vehicles in operation will be equipped with a silencer on their exhaust system
  - Where necessary appropriate lubricant will be applied to ensure that surfaces, which interact during mechanical movement, do not generate undesirable noise levels.
  - Safety measures, which generate noise such as reverse gear alarms on large vehicles, will be appropriately calibrated/adjusted.

- Screening/migration control
  - Appropriate measures will specifically be installed and or employed at the plant to act as screen and to reflect/reduce the noise
  - Appropriate non-metallic washers/insulation will be used with any joining apparatus to join screens such as corrugated iron to other structures and to each other. Such screens will be maintained in a fixed position.

- Sensitive landscapes
  - No prospecting and/or prospecting related activities will be conducted in areas of graves and burial sites, Archaeological and paleontological sites as well as areas or sites of special scientific interest.
  - Any prospecting activity planned in the 100 m floodline will be subjected to and NWA Section 21 (c) and (i) Authorization from the Department of Water and Sanitation.

- Visual aspects
  - All spray lights for roads and where infrastructure is located will be positioned in such a way that the beam of light and its reflection is away from a public road
  - Buildings or structures will be painted and maintained during the mine's operating life. After closure will these structures be removed if no further use is found for them
  - Any new infrastructure will take into account the visual impact this might have on the public
  - The open pits will be subjected to progressive backfilling and rehabilitation (including vegetation).

- Waste disposal:
  - Waste material of all description inclusive of receptacles, scrap, rubble and tyres will be removed entirely from the proposed area and disposed of at a recognized landfill facility.
  - It will not be permitted for any waste to be buried or burned on site.

m) **Final proposed alternatives**

(Provide an explanation for the final layout of the infrastructure and activities on the overall site as shown on the final site map together with the reasons why they are the final proposed alternatives which respond to the impact management measures, avoidance, and mitigation measures identified through the assessment)

All prospecting processes and site layout has been initially planned to cause the minimal possible impacts. Any alterations or alternatives in prospecting related processes may result in greater environmental disturbances and thus ruled out during the early stages of project planning.

The locality of the project area is very rural and should the office sites be relocated to town rather than being on the project area itself the traveling distance may halter the cost effectiveness of the project as well as productivity due to the absence of management personnel during the activities.

The current site layout and prospecting processes proposed for this operation proof to be the best possible option and layout with the minimal negative impacts in regard to the biophysical, socio-economic and cultural environment.

n) **Aspects for inclusion as condition of Authorization.**

Any aspects which have not formed part of the EMPr that must be made conditions of the Environmental Authorization.

At this stage all aspects that must be included into the environmental authorization are detailed in this document. Should any aspects arise that needs to be made conditions this document will be updated accordingly and will be submitted to all relevant departments.

o) **Description of any assumptions, uncertainties and gaps in knowledge.**

(Which relate to the assessment and mitigation measures proposed)

Any assumptions, uncertainties and gaps in knowledge that could arise during the operation of the prospecting activities will be addressed and mitigation measures implemented to prevent any damage to the environment. Such assumptions, uncertainties and gaps in knowledge will be described, implemented and handed to the relevant departments.

To prevent any unnecessary assumptions, uncertainties and gaps in knowledge, the Environmental Impact Assessment part of this document should not be read alone, as it only contain impact assessment with summarized management options, but rather read as a whole with the Environmental Management Programme, which include detailed management measures for each listed activity as described in the Environmental Impact Assessment section.

p) **Reasoned opinion as to whether the proposed activity should or should not be authorized**

i) Reasons why the activity should be authorized or not.

Should the area proof feasible for mining during the prospecting activities and mine development occur it will have a possible positive impact on the socio-economic environment on local and possibly regional scale. The socio-economic conditions will not only be improved through employment opportunities that will arise, but the income injection into the broader community may provide for better healthcare, housing and education opportunities.

ii) Conditions that must be included in the authorization

(1) Specific conditions to be included into the compilation and approval of EMPr

Specific conditions to be included into the compilation and approval of the EIA/EMPr are the adherence to all mitigation measures as stipulated within the EIA/EMPr.

(2) Rehabilitation requirements.

Rehabilitation Requirements should include, but is not limited to the following:

- The area must be rehabilitated as close as possible to its original natural pre-prospected state.
- Rehabilitation must be done to the complete satisfaction of all relevant departments
- Where necessary must a soil bed be provided and sawn with indigenous plant species to ensure re-establishment of vegetation.
- A two to three year monitoring programme must be implemented to ensure the success of vegetation re-establishment and the elimination of invader plant species.
- All other rehabilitation measures and closure objectives as contained within the EIA/ EMPr, mitigation measures inclusive, must be adhered to or a grounded reason for why any of these could not be met.

q) Undertaking

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic assessment report and the Environmental Management Programme report.

The Directors of Makeshift 1182 (Pty) Ltd confirms that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Environmental Impact Assessment Report and the Environmental Management Programme Report.

r) Financial Provision.

State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation.

CALCULATION OF THE QUANTUM

Applicant: MAKESHIFT 1182 (PTY) LTD — Location: THE OAKS 153 MR — Date: Sep-19

No.	Description	Unit	A Quantity	B Master Rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	200	R 16.40	1	1	R 3 280.00
2 (A)	Demolition of steel buildings and structures	m2	25	R 228.40	1	1	R 5 710.00
2(B)	Demolition of reinforced concrete buildings and structures	m2	85	R 336.59	1	1	R 28 610.15
3	Rehabilitation of access roads	m2	4 000	R 40.87	1	1	R 163 480.00
4 (A)	Demolition and rehabilitation of electrified railway lines	m		R 396.70	1	1	R -
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m		R 216.38	1	1	R -
5	Demolition of housing and/or administration facilities	m2	33	R 456.80	1	1	R 15 074.40
6	Opencast rehabilitation including final voids and ramps	ha	0.09	R 232 488.77	1	1	R 20 923.99
7	Sealing of shafts adits and inclines	m3		R 122.62	1	1	R -
8 (A)	Rehabilitation of overburden and spoils	ha	0.003	R 159 640.69	1	1	R 478.92
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha		R 198 829.59	1	1	R -
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha		R 577 495.38	1	1	R -
9	Rehabilitation of subsided areas	ha	0.0337	R 133 675.03	1	1	R 4 504.85
10	General surface rehabilitation	ha		R 126 462.35	1	1	R -
11	River diversions	ha		R 126 462.35	1	1	R -
12	Fencing	m	12	R 144.25	1	1	R 1 731.00
13	Water management	ha		R 48 084.54	1	1	R -
14	2 to 3 years of maintenance and aftercare	ha	0.561	R 16 829.59	1	1	R 9 441.40
15 (A)	Specialist study	Sum				1	R -
15 (B)	Specialist study	Sum				1	R -
					Sub Total 1		R 253 234.71

1	Preliminary and General	R 30 388.17	weighting factor 2 1	R	30 388.17
2	Contingencies	R 25 323.47		R	25 323.47
			Subtotal 2	R	308 946.35
			VAT (15%)	R	43 252.49
			Grand Total	R	**352 198.83**

i) Explain how the aforesaid amount was derived

As seen from the above table the amount of **R 352 198.83** was calculated using the Department of Mineral Resources' approved Financial Provision Quantum Calculation table.

ii) Confirm that this amount can be provided for from operating expenditure.

(Confirm that the amount is anticipated to be an operating cost and is provided for as such in the Mining Work Programme, Financial and Technical Competence Report or Prospect Working Programme as the case may be.)

The above stated amount can be provided from, as part of, the 1st year's operating expenditure and is in the submitted Revised Prospecting Work Programme anticipated as an operating cost and was provided for as such.

s) Other information required by the competent Authority.

i) Compliance with the provisions of sections 24(4)(a) and (b) read with section 24(3)(a) and (7) of the National Environmental Management Act (Act 107 of 1998) the EIA report must include the:-

(1) Impact on the socio-economic conditions of any directly affected person.

(Provide the results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attached the investigation report as **Appendix 2.19.1** and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6.and 2.12 herein)

The main land use in the area is grazing field for livestock and some game farming activities. Prospecting activities will have a minimal direct impact on the economic conditions of the affected farmland in the form of income due to the loss of grazing field resulting in the need for the farmer to obtain supplementary feed to sustain farming activities.

Indirect impacts are more positive towards the community and towns. Five measures of economic impacts can be used to demonstrate the potential positive effect of the proposed mining operation on the local economy:

- Employment – the extent of employment can be measured as number of jobs or in terms of full time equivalents
- Payroll income – the gross remuneration of employees in terms of salaries and wages
- Capital Expenditure (CAPEX) – the total amount spent on the purchasing of fixed assets and total spent on construction
- Operating expenditure and maintenance (OPEX) – the total amount spent locally by businesses on goods and services, excluding salaries and wages as well as rents or interest.
- Revenue – The total value of sales arising from business activity at the mine

(2) Impact on any national estate referred to in section 3(2) of the National Heritage resources Act.

(Provide the results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial diamond prospecting on any national estate referred to in section 3(2) of the National Heritage resource Act 1999 (Act No 25 of 1999) with the exception of the national estate contemplated in section 3(2)(*i*)(vi) and (vii) of that Act, attach the investigation report as **Appendix 2.19.2**.and confirm that the applicable mitigation is reflected in 2.5.3; 2.11.6 and 2.12 herein)

An Archaeological Assessment was not conducted as this document only servers as a revision to the already approved Environmental Impact Assessment / Environmental Management programme Report.

Impacts are not foreseen, but management will still follow the guidelines on management and avoidance actions as described within Section A.1(h)(i) and Section A.1(l) of this document to limit or prevent any future impacts.

t) Other matters required in terms of section 24(4)(a) and (b) of the Act.

(The AEP managing the application must provide the competent authority with detailed, written proof of an investigation as required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist.)

The compiler of this document, also the appointed EAP, will be visiting the area during the consultation phase of this document and the document will be updated and finalized accordingly before final submission to the relevant Department of Mineral Resources.

PART B

ENVIROMENTAL MANAGEMENT PROGRAMME REPORT

1) **Draft environmental management programme.**

a) Details of the EAP,(Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required)

The details and expertise of the Environmental Assessment Practitioner are already included in Part A Section 1(a) of this document, but also included below.

Details of the EAP

Name of the Practitioner:	Lindie Wiehahn
IAIAsa Registration:	Lindie Wiehahn 5537
Tel no:	072 141 4164
Fax No:	086 606 6315
e-mail address:	lindie@liwico.co.za

The qualifications of the EAP

Current qualifications in this field were obtained through short courses at the University of Potchefstroom, which is the following:

- Introduction to Environmental Management (2002)
- Environmental Impact Assessment (2002)
- The Legal Framework for Managing Water in South Africa (2002)

Summary of the EAP's past experience.

During the year 2002 Lindie assisted with two Environmental Impact Assessments for a Golf Course development in Modder Rivier (today known as the Magersfontein Memorial Golf Course) and a Cottage development on the farm Avoca in the Douglas district. Later the same year she successfully completed her first sole Environmental Impact Assessment for the development of a filling station on the N12 at Warrenton.

Lindie was employed since then as an Environmental Consultant. Experiences obtained during these years were the drafting of Environmental Management Programmes, Environmental Management Programme Reports, Environmental Monitoring and Compliance Reports and Environmental Risk Reports. She also conducted several Environmental Impact Assessments for Mining Rights on La Reysstryd 53 IO, Lichtenburg (2004), Longlands, Barkly West (2004) and Lohatlha 673, Postmasburg (2009, 2011).

After the liquidation of Geo-Rock International, Lindie went into partnership with John H.R Loots till 2015. During these years she continued working as an Environmental Consultants and successfully an Environmental Impact Assessement on the farm Groot Derm 10, Alexanderbay (2012). From the year 2015 till date she undergone company name changes and is now consulting under LW Consultants.

Successful projects under the new DMR and NEMA regulations:

- EIA/EMPr Mining Right Roodepan 70 (2015)
- BEAR/EMPr Prospecting Right Bergplaats 502 (2016)
- BEAR/EMPr Mine Permit Longlands 350 (2016)
- EIA/EMPr Mining Right Nootgedacht 66 (2017)
- BEAR/EMPr Mine Permit Rooifontein 1722 (2017)
- BEAR/EMPR Mine Permit Du Toitspan 119 (2018)
- Rehabilitation NWA Vaal River Schmidtsdrift 248 (2018)
- BEAR/EMPR Mine Permit Middenspruit 151 (2018)
- BEAR/EMPR Mine Permit Boschpoort 558 (2018)

Successful projects abroad under their specified regulation:

- EIA/EMPr Mining Chimanimani, Zimbabwe (2018)

b) Description of the Aspects of the Activity (Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management programme is already included in PART A, section (1)(h) herein as required).

The description of the aspects of the activity are already covered in Part A Section 1(h) of this document, but also included below.

ACTIVITY Whether listed or not listed. (E.g. Excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyers, etc...etc...etc.)	**POTENTIAL IMPACT** (E.g. dusts, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc...etc.)	**ASPECTS AFFECTED**	**PHASE** In which impact is anticipated. (E.g. Construction, commissioning, operational, decommissioning, closure, post-closure.)	**SIGNIFICANCE** If not mitigated	**MITIGATION TYPE** (modify, remedy, control, or stop) Through (e.g. noise control measures, storm-water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc...etc. E.g. Modify through alternative method. Control through noise control. Control through management and monitoring through rehabilitation....	**SIGNIFICANCE** If mitigated
Geological investigations	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Rehabilitation	Low

	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
INITIAL DRILLING						
Drilling	Vegetation	Loss	Construction	Low	Vegetation clearing control Rehabilitation	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Rehabilitation Soil pollution control Chemical handling protocol	Medium
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		High	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		Low	Noise level control Operational hours	Low
	Air quality	Degradation		Low	Dust control Low	Low
	Archaeological items	Loss		High	Avoid identified heritage sites	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

Sampling	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Low	Rehabilitation	Low
	Soil	Pollution		-	-	-
	Grazing	Loss		Low	Vegetation clearing control	Low
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			-	-	-
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Ablution	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		Low	Facility maintenance Rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Storm water		Medium	Waste water management Regular septic tank draining	Low

	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Vehicle storage	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Medium
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

Chemical storage	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate Rehabilitation Regular inspections Adhere to mitigation measures Bunker-bay installation Chemical handling protocol	Low
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			-	-	-
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Diesel storage	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Medium
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-

	Fauna			Low	-	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive areas Adhere to mitigation measures	Low
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		High	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Domestic waste facility	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		-	-	-
	Vegetation	Loss/disturbance		-	-	-
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		High	Regular removal Report to rehabilitation officer	Low
	Fauna			Medium	Adhere to mitigation measures Immediate clean-up Fencing of site	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Waste management Litter pollution management Rehabilitation	Low

	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
BULK SAMPLING						
Bulk sample excavations	Vegetation	Loss	Construction	Low	Vegetation clearing control Restriction to roads	Low
	Geological	Loss	Operational	High	-	High
	Topographic	Change		Medium	Rehabilitation	Low
	Soil	Pollution		High	Immediate rehabilitation Continuous inspections Vehicle maintenance	Medium
	Grazing	Loss		Medium	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Traffic restriction to roads Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of mine roads Speed restrictions	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Low	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low

	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Topsoil	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low
	Soil	Pollution		Medium	Rehabilitation Continuous inspections	Low
	Grazing	Loss		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspection Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Protect against wind erosion	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

Overburden	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low
	Soil	Pollution		Medium	Rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Traffic restriction to cleared areas Vegetation clearing control	Low
	Vegetation	Loss/disturbance		Low	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Protect against wind erosion	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Stock piles	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		High	Rehabilitation	Low
	Soil	Pollution		Medium	Immediate rehabilitation Regular inspections	Low

	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Vegetation clearing control Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Loss		Low	Storm water control	Low
	Noise	Elevated levels		Low	Operations within office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of mine roads	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Waste dumps	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Medium	Rehabilitation	Low
	Soil	Pollution		Medium	Immediate rehabilitation Continuous inspections	Low
	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to cleared areas	Low

	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Vegetation clearing control Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Regular inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Low	Storm water control	Low
	Noise	Elevated levels		Low	Operations within office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid significant sensitive sites	-
	Sensitive landscape	Destruction		Medium	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation Specified dump height	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Loading and hauling	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Vehicle maintenance	Medium
	Grazing	Loss		Medium	Restriction to roads Continuous rehabilitation	Low
	Vegetation	Loss/disturbance		Medium	Restriction to mine roads Continuous rehabilitation	Low
	Water table	Depressed		-	-	-

	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Reporting to environmental officer	Low
	Fauna			Low	Noise lever control Waste management	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Speed restriction	Low
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Speed restrictions Minimal traffic possible	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Office block	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Traffic restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Traffic restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna			Low	Waste management	Low
	Water quality	Waste water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas Speed restriction	Low

	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspections	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Plant site	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Machine maintenance Immediate rehabilitation Regular inspection Chemical handling control	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Reporting to environmental officer	Low
	Fauna			Low	Noise level control Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		High	Avoid site of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low

	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Mineral processing	Vegetation	Loss	Construction	-	-	-
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Vehicle maintenance Immediate rehabilitation Regular inspections Chemical handling control	Medium
	Grazing	Loss		Medium	Restriction to cleared areas Rehabilitation	Low
	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna	Migration		Low	Noise level control Waste management	Low
	Water quality	Waste water		-	-	-
	Noise	Elevated levels		Low	Operations during office hours Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of exposed areas Speed restriction Spraying systems on conveyors	Low
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		Low	Dust control	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspections	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspections	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

Ablution	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		Low	Facility maintenance Immediate rehabilitation Regular inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	Waste management	Low
	Water quality	Waste water		Medium	Waste water management Regular septic tank draining	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Vehicle parking lot	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low

	Vegetation	Loss/disturbance		Medium	Restriction to cleared areas Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to environmental officer	Low
	Fauna			Low	Waste management	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		Low	Silencer systems on vehicles	Low
	Air quality	Degradation		Low	Dampening of cleared areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		Medium	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspections	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspections	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Wash-bay	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Medium
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	Operations within office hours Waste management	Low

	Water quality	Waste water		High	Waste water management Draining/cleaning of waste water Biodegradable detergents	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Parts store room	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Low
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna	Migration		Low	-	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-

	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Temporary Workshop facility	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to environmental officer	Low
	Fauna			Low	Operations within office hours Waste management	Low
	Water quality	Waste water		High	Waste water management Draining/cleaning of waste water	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed area	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Adhere to mitigation measures Avoid significant sensitive sites	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/metal management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive

Storage facilities	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker bay installation Chemical handling protocol	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to rehabilitation officer	Low
	Fauna	Migration		Low	Operations within office hours Waste management	Low
	Water quality	Storm water		Low	Storm water control Waste water management Draining/cleaning of waste water	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of cleared areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	-
	Visual impact	Scenery loss		Low	Rehabilitation Waste/Metal Management	Low
	Waste	Disposal	Decommissioning	High	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Medium	Closure standards	Positive
Diesel storage	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-

	Soil	Pollution		High	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Medium
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Continuous inspections Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		High	Storm water control Soil pollution management	Medium
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		High	Avoid sites of significance	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	-
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		High	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Medium	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Domestic waste facility	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil / Litter	Pollution		Low	Immediate clean-up Continuous inspections	Low
	Grazing	Loss		Low	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation Restriction to cleared areas	Low

	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Medium	Adhere to mitigation measures Immediate clean-up Fencing of site	Low
	Water quality	Storm water		Medium	Storm water control	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Low	Avoid significant sensitive sites Adhere to mitigation measures	-
	Visual impact	Scenery loss		Low	Waste management Litter pollution management Rehabilitation	Low
	Waste	Disposal	Decommissioning	Medium	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Power lines	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	-	Low
	Water quality	Storm water		-	-	-
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		-	-	-
	Visual impact	Scenery loss		-	-	-

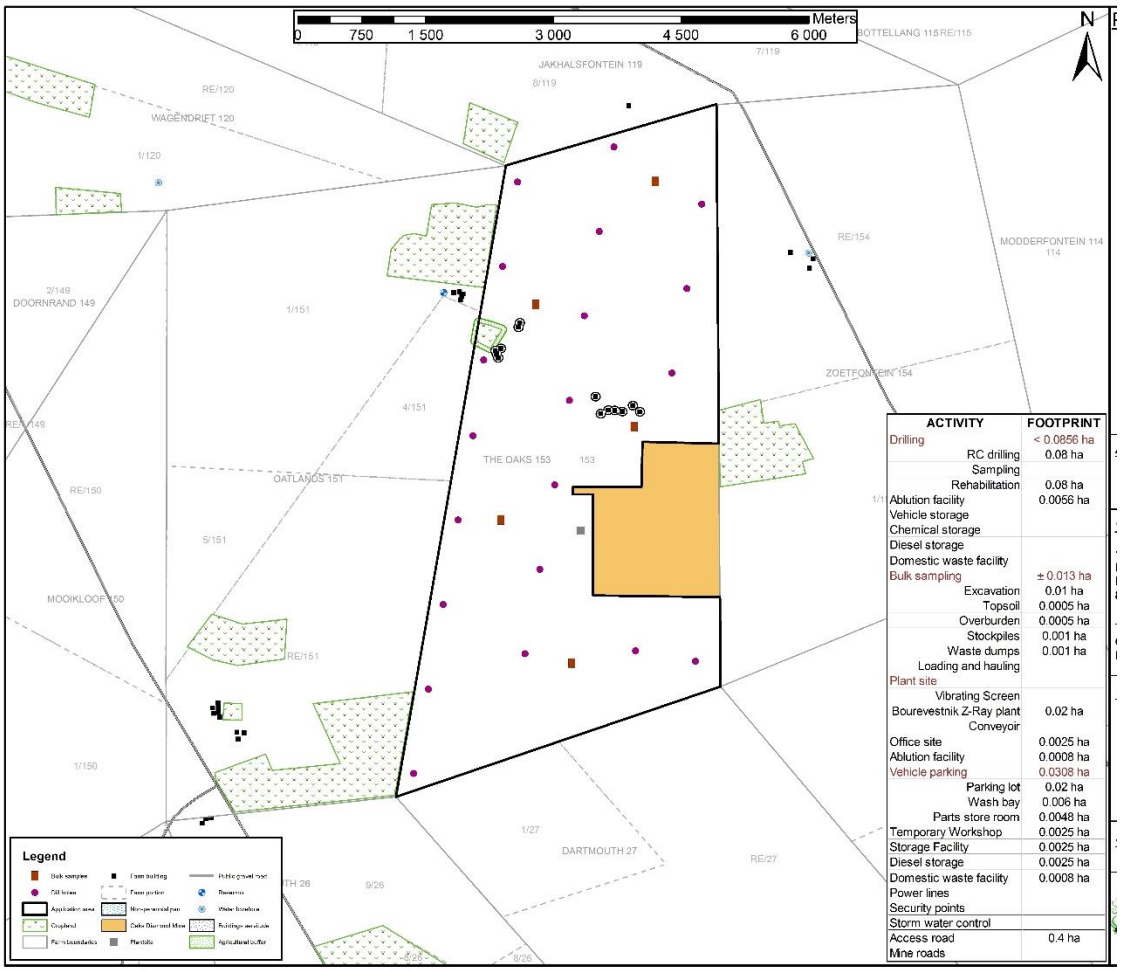
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Security points	Vegetation	Loss	Construction	Medium	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		High	Regular inspections Immediate rehabilitation Littering control	Low
	Grazing	Loss		Medium	Rehabilitation Restriction to cleared areas	Low
	Vegetation	Loss/disturbance		Medium	Rehabilitation Restriction to cleared areas	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		Medium	Regular removal Report to rehabilitation officer	Low
	Fauna			Low	-	Low
	Water quality	Storm water		Medium	Storm water control Soil pollution management	Low
	Noise	Elevated levels		Low	Operations during office hours	Low
	Air quality	Degradation		Low	Dampening of exposed areas	Low
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Storm water control	Vegetation	Loss	Construction	Low	Vegetation clearing control	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		Medium	Rehabilitation	Low
	Soil	Pollution		-	-	-

	Grazing	Loss		Low	Rehabilitation	Low
	Vegetation	Loss/disturbance		Low	Rehabilitation	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna			Low	-	Low
	Water quality	Storm water		Positive	-	Positive
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		-	-	-
	Archaeological items	Loss		-	-	-
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites	Low
	Visual impact	Scenery loss		-	-	-
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Low	Regular inspection	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspection	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive
Access and hauling roads	Vegetation	Loss	Construction	Medium	Vegetation clearing control Minimum roads possible	Low
	Geological	Loss	Operational	-	-	-
	Topographic	Change		-	-	-
	Soil	Pollution		-	-	-
	Grazing	Loss		Medium	Rehabilitation Vegetation clearing control Restriction to roads	Low
	Vegetation	Loss/disturbance		Medium	Restriction to roads Rehabilitation Vegetation clearing control	Low
	Water table	Depressed		-	-	-
	Vegetation	Invader plants		-	-	-
	Fauna	Migration		Low	-	Low
	Water quality	Storm water		Medium	Storm water control Erosion control Soil pollution management	Low
	Noise	Elevated levels		-	-	-
	Air quality	Degradation		Low	Dampening of roads	Low

	Archaeological items	Loss		High	Restriction to roads Avoid significant sites	Low
	Sensitive landscape	Destruction		Medium	Avoid significant sensitive sites Adhere to mitigation measures	Low
	Visual impact	Scenery loss		Low	Rehabilitation	Low
	Waste	Disposal	Decommissioning	Low	Management standards	Positive
	Re-vegetation	Re-growth		Medium	Regular inspections	Positive
	Exposed area Rehab	Re-vegetation	After closure	Low	Regular inspections	Positive
	Safety risks	Waste disposal		Low	Closure standards	Positive

c) Composite Map

(Provide a map (**Attached as Appendix**) at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environment sensitivities of the preferred site, indicating any areas that should be avoided, including buffers)



d) Description of Impact management objectives including management statements

i) Determination of closure objectives

(Ensure that the closure objectives are informed by the type of the environment described in 2.4 herein)

The sole determined objective is to rehabilitate the area during and after prospecting activities to such an extent that the post-prospected environment is almost in the same condition as the original undisturbed environment. This can be achieved through the following:

- To prevent the sterilization of any ore reserves
- To prevent the establishment of any permanent structures or features
- To manage and limit any impact to the surface and groundwater aquifers in such a way that an acceptable water quality and yield can still be obtained, when a closure certificate is issued.
- To establish a stable and self-sustainable vegetation cover
- To limit and rehabilitate any erosion features and prevent any permanent impact to the soil capability of the project
- To limit and manage the visual impact of the project
- To safeguard the safety and health of humans and animals on the area

When rehabilitation proves successful the vegetation re-growth must be of such quality that this area can be used as a grazing field for farm livestock (as it currently the case).

ii) **The process for managing any environmental damage, pollution, pumping and treatment of extraneous water or ecological degradation as a result of undertaking a listed activity.**

The process for managing any environmental damage, pollution and/or ecological degradation is first hand done through mitigating a listed activity in process to minimize or avoid the impacts that may result from the activity.

Should the mitigated impact still pose a risk for environmental damage, pollution and/or ecological degradation the second option is to manage the impact to prevent environmental damage.

The last method of environmental protection is through remediation of the accidental pollution due to unforeseen activity mitigation and impact management.

iii) **Potential risks of Acid Mine Drainage.**

(Indicate whether or not the mining can result in acid mine drainage)

The bulk sampling processes are typical of extracting diamonds from diamondiferous alluvial gravels. The diamondiferous gravel prospected for is excavated to be processed by means of modern diamond recovering process. This process does not include any chemical extraction of any mineral or commodity, which results in acidic waste water, and rules out the potential risk of Acid Mine Drainage.

There is however a potential for bad quality leachate from the disturbed gravels. This is due to natural occurring high sulphate concentrations found in the gravel beds. The natural alkalinity of the groundwater should none-the-less act as a buffer with an assimilative capacity, thus preventing acid drainage forming.

iv) **Steps taken to investigate, assess, and evaluate the impact of acid mine drainage.**

Steps to be taken to investigate, assess and evaluate the impact of acid mine drainage have not been considered nor stipulated as the prospecting and prospecting related processes does not produce chemical contaminated waste water that result in possible acid mine drainage.

v) **Engineering or mine design solutions to be implemented to avoid or remedy acid mine drainage.**

Engineering solutions has not been planned or drafted to be implemented to avoid or remedy acid mine drainage as the prospecting and prospecting related processes does not produce chemical contaminated waste water that result in possible acid mine drainage.

vi) **Measures that will be put in place to remedy any residual or cumulative impact that may result from acid drainage.**

Measures that needed to be planned and put in place to remedy any residual or cumulative impact that may result from acid drainage were ruled out due to the fact that acid drainage is not a result of the type of prospecting activities.

vii) **Volumes and rate of water use required for the mining, trenching or bulk sampling operation.**

The diamond recovering process as a whole does not require the use of water and all process are dry.

Other mining related activities such as the ablution facilities, wash-bay and office buildings also require the use of water, but the exact amount of water needed are unknown.

viii) **Has a water license been applied for?**

As this document serves as a revision to the Approved Environmental Impact Assessment / Environmental Management Programme Report it can be safely stated that the project does not need a valid Water Authorization.

ix) **Impacts to be mitigated in their respective phases**

Measures to rehabilitate the environment affected by the undertaking of any listed activity.

ACTIVITIES (As listed in 2.11.1)	**PHASE** of operation in which activity will take place. State: Planning and design, Pre-construction, Construction, Operational, rehabilitation, Closure, Post closure	**SIZE AND SCALE of disturbance** (volumes, tonnages and hectares or m^2)	**MITIGATION MEASURES** (describe how each of the recommendations herein will remedy the cause of pollution or degradation and migration of pollutants)	**COMPLIANCE WITH STANDARDS** (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)	**TIME PERIOD FOR IMPLEMENTATION** Describe the time period when the measures in the environmental management programme must be implemented. Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation therefore state either:- Upon cessation of the individual activity Or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be
Geological Investigations	Operational	1 733.0312 ha	• Strict adherence to the farm roads and no off-road driving to prevent trampling of vegetation and ground compaction. • On accidental spillage the contaminated soil will be removed and appropriately disposed of. • Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner. • Littering of any product, including cigarette buds, will not be tolerated. • The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• Avoid ground sterilization and/or disturbance of vegetation re-growth. • Preventing unnecessary stress in animals, loss of life and/or employee injury. • Avoiding vegetation loss and ground compactions, which can lead to ground erosion. • Avoid possible animal suffering and scenery degradation. • With all measures in place is the mine still ultimately responsible for environ-mental conservation.	• Integrated into activity • Integrated into activity • Integrated into activity • Integrated into activity • Integrated into activity • Decommissioning of activity

			• The mine shall ensure that all vehicle and contractors are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies.	• Commencement of activity
INITIAL DRILLING		**<0.0856 ha**			
Initial Drilling and sampling	Construction	Total: 0.08 ha Per hole: 0.004 ha	• Only necessary vegetation will be cleared.	• Minimizing unnecessary vegetation loss	• Commencement of activity
			• On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species.	• Promote animal conserva-tion in minimizing loss of animal life.	• Commencement of activity
			• All infrastructure will be equipped with appropriate signs indicating function and potential dangers.	• Health and Safety objective in preventing injury to personnel and/or public individuals	• Commencement of activity • Integrated into activity
			• A qualified archeologist must monitor site establishment.	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity • Integrated into activity
			• Drip-tray installation on drill vehicles.	• Avoiding hydro-carbon fluid spillage causing soil sterilization.	• Commencement of activity • Integrated into activity
			• Impervious sheet layout under drill rig.	• Avoid hydro-carbon fluid spillage causing soil sterilization	• Commencement of activity • Integrated into activity
	Operational		• Old diesel and related chemicals must be discarded within appropriate marked closed containers	• Avoiding hydro-carbon fluid spillage as far as possible.	• Integrated into activity • Decommissioning of activity
			• On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there of.	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity

			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity
			• All vehicle traffic are restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion	• Commencement of activity • Integrated into activity
			• No indigenous shrubs or trees will unnecessarily be uprooted and never to be used for firewood	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity • Integrated into activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner.	• Preventing unnecessary stress in animals, loss of life and/or employee injury	• Commencement of activity • Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for compliance with the relevant legislation in respect to noise.	• Minimizing noise disturbance having an impact on farm owners and fauna	• Integrated into activity
			• Hearing protection will be made available to all employees where attenuation cannot be implemented.	• Health and Safety requirement preventing hearing loss of employees	• Integrated into activity
			• Suppression of dust on cleared areas will occur by the spraying water when necessary.	• Health and safety as well as NEMA requirement ensuring good air quality and preventing related lung illnesses	• Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity • Integrated into activity • Decommissioning of activity

			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. • The mine shall ensure that all vehicle and contractors are aware of procedures and restrictions in terms of this document. • Fire extinguishers will be kept in good order and serviced regularly. • Hard hats, earplugs, safety glasses, dust masks, gloves, hard point boots, reflector vests and reflective overalls is compulsory before entering this area. • The entrance will be clearly marked with all regulatory signs, to indicate a potentially dangerous zone. • Related waste/ scrap must be disposed of in the appropriate manner	• With all measures in place is the mine still ultimately responsible for environ-mental conservation. • Forming part of the mine's Environmental Awareness initiative and strategies • Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas. • Health and Safety re-quirement preventing employee injury and/or possible loss of life • Health and Safety as well and Mineral Act require-ment preventing public individual injury • Waste management standard preventing fauna and/or human injury as well as environmental de-gradation.	• Integrated into activity • Decommissioning of activity • Commencement of activity • Integrated into activity • Integrated into activity • Commencement of activity • Integrated into activity • Commencement of activity • Integrated into activity • Decommissioning of activity
	Decommissioning		• The drill hole will be backfilled with the drill chips in a reverse sequence as extracted. • All chemical spills will be rehabilitated immediately	• Environmental closure objective to create a sustain-able environment after operations • Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity • Integrated into activity

			• Rip and rehabilitate all compacted areas. • Regular inspection for the removal of invader species.	• Remedying compacted areas to prevent erosion and promote vegetation re-growth • Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Integrated into activity • Decommissioning of activity • Closure of activity
	After Closure		• A 2 – 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Closure of activity
Ablution facility	Construction	0.0004 ha	• Only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • No indigenous shrubs or trees will be unnecessarily uprooted • Concealed septic tanks must be installed above ground, where it can be regularly inspected for leakage	• Minimizing unnecessary vegetation loss • Promote animal conser-vation in minimizing loss of animal life • Minimizing unnecessary vegetation loss and preservation species • For the ease of maintenance and leakage can be seen immediately	• Commencement of activity • Commencement of activity • Commencement of activity • Commencement of activity
	Operational		• Ablution blocks shall be at all times be sanitized • Sanitary bins will be provided and no sanitary material will be allowed within the septic tanks	• Health and Safety issue, avoiding the spread of human diseases • Preventing the burst of the septic tank as well as littered materials creating health risks	• Commencement of activity • Integrated into activity • Commencement of activity • Integrated into activity

			• All human waste and related waste will be contained within septic tanks installed for this purpose	• Promoting environmental health by avoiding the spread of diseases and parasites	• Integrated into activity
			• Septic tanks and chemical toilets will be chemically treated and maintained by a contracting agency	• Health and safety related preventing spillage and ground contamination	• Integrated into activity
			• Sanitary material within the bins provided will be closed in colour plastics and disposed of as domestic waste or removed by the agency responsible for the facility	• Preventing littered materials creating health risks and separation from normal domestic wastes	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner.	• Preventing unnecessary stress in animals, loss of life and/or employee injury	• Integrated into activity
			• Littering of any product, including cigarette buds shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and unnecessary environmental degradation	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environmental conservation.	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
			• The entrance will be clearly marked with all regulatory signs	• Regulatory requirement to indicate structure function	• Commencement of activity

	Decommissioning		• All structures will be broken down and removed from site. • All spills will be rehabilitated immediately • Rip and rehabilitate all compacted areas. • Regular inspection for the removal of invader species.	• Rehabilitation needs to be done to comply with closure objectives • Prevent the degradation of environmental health • Remedying compacted areas to prevent erosion and promote vegetation re-growth • Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity • Integrated into activity • Decommissioning of activity • Decommissioning of activity • Decommissioning of activity • Closure of activity
	After closure		• A 2 – 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Closure of activity
Vehicle storage	Construction		•	•	•
	Operational		• Drip pans will be readily available and no parked vehicle will be without a drip pan. • No vehicle repairs and maintenance will occur within the operational area as far as possible. • Old diesel and related chemicals must be discarded within appropriate marked close containers • On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there off.	• Avoiding hydro-carbon fluid spillage causing soil sterilization • Preventing hydro-carbon fluid spillage and scat-tered waste metals • Avoiding hydro-carbon fluid spillage as far as possible • Avoid ground sterilization and/or disturbance of vegetation re-growth	• Commencement of activity • Integrated into activity • Integrated into activity • Integrated into activity • Decommissioning of activity • Integrated into activity

			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or distur-bance of vegetation re-growth	• Integrated into activity
			• Suppression of dust on cleared areas will occur by the spraying water when necessary.	• Preventing and/or mini-mizing dust upliftment protecting the air quality as far as possible	• Integrated into activity
			• Littering of any product, including cigarette buds shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is it still the mine's ultimate responsibility in regard to environmental conservation	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Commencement of activity • Integrated into activity
	Decommissioning		• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Rip and rehabilitate all compacted areas	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity

			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Closure of activity
	After closure		• A 2 – 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Closure of activity
Chemical Storage	Construction		•	•	•
	Operational		• Stored chemicals must be in marked closed containers	• Chemical storing protocol, indicating danger and remediation steps	• Commencement of activity • Integrated into activity
			• For remediation purposes a neutralizing agent for each chemical must be available at all times	• Minimizing soil loss to neutralize rather than remove	• Commencement of activity • Integrated into activity
			• Un-used chemicals must be separated from used chemicals as well as each type of chemical will be group to prevent cross-contamination	• Avoid fire hazard as some chemicals may react with each other	• Commencement of activity • Integrated into activity
			• Chemicals removed from storage will be in approved containers to minimize the possibility of spillage	• Prevent spillage and ground contamination	• Integrated into activity
			• Fire extinguishers for this purpose will be available at all times	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Integrated into activity
			• Chemical and chemical containing waste will be stored in closed containers.	• Chemical handling proto-col avoiding spillage and ground contamination	• Integrated into activity

			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers. • The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• With all measures in place is the mine still ultimately responsible for environmental conservation • Forming part of the mine's Environmental Awareness initiative and strategies	• Integrated into activity • Decommissioning of activity • Commencement of activity • Integrated into activity
	Decommissioning		• With decommissioning of the mine the contractor is responsible for removing his own chemical products. • All chemical spills will be rehabilitated immediately	• Avoiding environmental contamination also rehabilitation requirement in complying with closure objective. • Avoid ground sterilization and/or disturbance of vegetation re-growth	• Decommissioning of activity • Integrated into activity • Decommissioning of activity
Diesel storage	Construction		• Diesel cart will be equipped a leak-proof bay, supporting the tank volume plus 10%. • Will stand on a impervious sheet	• Avoiding hydro-carbon fluid spillage causing ground sterilization that can lead to erosion • Further fluid spillage prevention	• Commencement of activity • Commencement of activity • Integrated into activity
	Operational		• Vehicles which are filled with fuel will park on a plastic sheet / floor for if any spillage occurs it can be cleaned • Two fire extinguishers will be present at all times	• Avoid hydro-carbon fluid spillage as far as possible causing ground sterilization • Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Integrated into activity • Commencement of activity • Integrated into activity

			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or distur-bance of vegetation re-growth	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environ-mental conservation	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
	Decommissioning		• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
	After closure		•	•	•
Domestic waste facility	Construction		•	•	•
	Operational		• Domestic waste will be kept in closed marked containers.	• Avoid windblown litter and/or protection against scaven-gers	• Commencement of activity • Integrated into activity
			• Containers will be removed on a daily basis.	• Waste handling protocol in keeping the environment clean	• Integrated into activity
			• Domestic waste will be dumped at a registered site for such disposal.	• Waste management protocol in preventing un-necessary litter pollution	• Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place it is still the mine's responsibility to ensure environmental conservation	• Integrated into activity • Decommissioning of activity

	Decommissioning		• With decommissioning of the mine, the contractors and mine employees will be responsible for the safe removal thereof.	• Avoiding litter pollution also rehabilitation require-ment in complying with closure objective.	• Integrated into activity • Decommissioning of activity
Bulk Sampling		±0.013 ha		•	•
Bulk sampling excavation	Construction	Total: 0.01 ha Per site: 0.00 ha	• The only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • Soil shall be exposed for a minimum time as possible once cleared of vegetation. The timing in clearing shall be co-ordinated as much as possible to avoid prolonged exposure to wind and water erosion • No indigenous shrubs or trees will be unnecessarily uprooted • Overburden and topsoil will be stored separately near the excavations. • A qualified Archeologist must monitor site establishment	• Minimizing unnecessary vegetation loss • Promote animal conserva-tion in minimizing loss of animal life. • Avoiding vegetation loss and ground compactions, which can lead to ground erosion • Minimizing unnecessary vegetation loss and preservation species • Environmental closure objective to create a sustainable environment after operations • Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity • Decommissioning of activity • Commencement of activity. • Integrated into activity • Decommissioning of activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity

	Operational		• When working on equipment outside the temporary workshop area the appropriate measure needs to be implemented to prevent chemical spillage	• Avoiding hydro-carbon fluid spillage causing soil sterilization.	• Integrated into activity • Decommissioning of activity
			• No vehicle repairs and maintenance will occur within the operational area and will be restricted to the temporary workshop area.	• Preventing hydro-carbon fluid spillage and scattered waste metals	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there off. Stored topsoil / tailings will be evenly spread to the recover the area	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or distur-bance of vegetation re-growth	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• All vehicle traffic are restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Washing of equipment shall be restricted to urgent maintenance requirements only.	• Avoiding hydro-carbon fluid spillage as far as possible	• Integrated into activity • Decommissioning of activity
			• No indigenous shrubs or trees will unnecessarily uprooted and used for fire wood	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended.	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity • Commencement of activity.

			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner.	• Preventing unnecessary stress in animals, loss of life and/or employee injury.	• Integrated into activity • Decommissioning of activity
			• Strict adherence to the mine roads and no off-road driving to prevent trampling of vegetation and ground compaction	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• A site will be identified and colour coded water tanks will be erected for safe human consumption.	• Health and Safety objective in preventing injury to personnel and/or public individuals	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The prospecting site shall be responsible for compliance with the relevant legislation in respect to noise.	• Minimizing noise distur-bance having an impact on farm owners and fauna	• Commencement of activity. • Integrated into activity • Decommissioning of activity • Commencement of activity.
			• Hearing protection will be made available to all employees where attenuation cannot be implemented.	• Health and Safety requirement preventing hearing loss of employees	• Integrated into activity • Decommissioning of activity
			• Every vehicle in operation will be equipped with a silencer on the exhaust system.	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Integrated into activity • Decommissioning of activity
			• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• With all measures in place is it still the mine's ultimate responsibility in regard to environmental conservation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Littering of any product ,including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity

			• The mine shall be responsible for any cleaning up resulting from the failure by his employees.	• Health and Safety requirement preventing employee injury and/or possible loss of life	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Hard hats, earplugs, safety glasses, dust masks, gloves, hard point boots, reflector vests and reflective overalls is compulsory before entering this area. • The entrance will be clearly marked with all regulatory signs, to indicate a potential dangerous zone. • Related waste/scrap must be disposed of in the appropriate manner.	• Health and Safety as well and Mineral Act requirement preventing public individual injury	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• The excavation will be filled with waste gravel and soil, with the topsoil and overburden in the correct order.	• Environmental closure objective to create a sustainable environment after operations	• Integrated into activity • Decommissioning of activity
			• Topsoil will be replaced immediately (14 days) on an area when backfilling is complete.	• Environmental closure objective	• Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Rip and rehabilitate all compacted areas	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Integrated into activity • Decommissioning of activity

			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion. • Regular inspection for the removal of invader species	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats. • Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species esta-blishment • Environmental closure objective to create a sustainable environment after operations.	• During closure of activity • Decommissioning of activity
Topsoil dump	Construction	0.0005 ha	• The only necessary vegetation will be cleared. • On vegetation should any nest with chicks or eggs be discovered a local nature conservation office shall be called to relocate the species • A qualified Archaeologist must monitor site establishment	• Minimizing unnecessary vegetation loss • Promote animal conserva-tion in minimizing loss of animal life. • Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity • Commencement of activity. • Commencement of activity. • Integrated into activity

	Operational		• All vehicle traffic are restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted and never to be used for firewood.	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner	• Preventing unnecessary stress in animals, loss of life and/or employee injury.	• Commencement of activity. • Integrated into activity
			• Suppression of dust where possible will occur by the praying of chemical bounded / fresh water	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Commencement of activity. • Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity

			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion • Regular inspection for the removal of invader species	• Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Decommissioning of activity • Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats. • Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation	• Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment • Environmental closure objective to create a sustainable environment after operations.	• During closure of activity • Decommissioning of activity • Decommissioning of activity
Overburden	Construction	0.0005 ha	• The only necessary vegetation will be cleared. • On vegetation should any nest with chicks or eggs be discovered a local nature conservation office shall be called to relocate the species	• Minimizing unnecessary vegetation loss • Promote animal conservation in minimizing loss of animal life.	• Commencement of activity • Commencement of activity.

			• A qualified Archaeologist must monitor site establishment	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity
	Operational		• All vehicle traffic are restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted and never to be used for firewood.	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner	• Preventing unnecessary stress in animals, loss of life and/or employee injury.	• Commencement of activity. • Integrated into activity
			• Suppression of dust where possible will occur by the praying of chemical bounded / fresh water	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Commencement of activity. • Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Integrated into activity • Decommissioning of activity

			• Topsoil will be replaced immediately (14 days) on an area when ripping is complete. • No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed. • All chemical spills will be rehabilitated immediately • Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion. • Regular inspection for the removal of invader species	• Environmental closure objective • Adherence to rehabilitation standards. • Avoid ground sterilization and/or disturbance of vegetation re-growth • Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment	• Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Decommissioning of activity • Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats. • Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation.	• Managing vegetation re-growth and promoting indigenous species establishment	• During closure of activity

			• A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation	• Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity
Stockpiles	Construction	0.001 ha	• The only necessary vegetation will be cleared.	• Minimizing unnecessary vegetation loss	• Commencement of activity
			• On vegetation should any nest with chicks or eggs be discovered a local nature conservation office shall be called to relocate the species	• Promote animal conserva-tion in minimizing loss of animal life.	• Commencement of activity.
			• A qualified Archaeologist must monitor site establishment	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity
	Operational		• All vehicle traffic is restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted and never to be used for firewood.	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner	• Preventing unnecessary stress in animals, loss of life and/or employee injury.	• Commencement of activity. • Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity

			• The mine shall be responsible for any cleaning up resulting from the failure by his employees	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
			• Regular inspection for the removal of invader species	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Closure of activity
			• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity

			• A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity
Waste dumps	Construction	0.001 ha	• The only necessary vegetation will be cleared.	• Minimizing unnecessary vegetation loss	• Commencement of activity
			• On vegetation should any nest with chicks or eggs be discovered a local nature conservation office shall be called to relocate the species	• Promote animal conserva-tion in minimizing loss of animal life.	• Commencement of activity.
			• A qualified Archaeologist must monitor site establishment	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity
	Operational		• All vehicle traffic is restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion.	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted and never to be used for firewood.	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner	• Preventing unnecessary stress in animals, loss of life and/or employee injury.	• Commencement of activity. • Integrated into activity

			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion.	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity
			• Regular inspection for the removal of invader species	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats.	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity • Closure of activity

			• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species esta-blishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity
Prospecting related structures		±4627 ha		•	•
Office site	Construction	0.0025ha	• All buildings will consist of appropriate signs indicating function and potential dangers • The only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • Soil shall be exposed for a minimum time a possible once cleared of vegetation. The timing in clearing shall be co-ordinated as much as possible to avoid prolonged exposure to wind and water erosion • No indigenous shrubs or trees will be unnecessarily uprooted	• • Minimizing unnecessary vegetation loss • Promote animal conserva-tion in minimizing loss of animal life • Adherence to rehabilitation standards. • Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity

			• A qualified Archeologist must monitor site establishment	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity
	Operational		• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• Health and safety as well as NEMA requirement ensuring good air quality and preventing related lung illnesses	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Domestic waste containers will be installed and easy accessible	• Preventing littered materials creating health risks and separation from normal domestic wastes	• Commencement of activity. • Integrated into activity
			• The exploration company shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environmental conservation.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Integrated into activity • Decommissioning of activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas.	• Commencement of activity. • Integrated into activity • Decommissioning of activity

	Decommissioning		• All structures will be broken down and removed from site. • All chemical spills will be rehabilitated immediately • Compacted areas will be ripped to a depth of 300 mm to provide a growth medium • No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed. • Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion. • Regular inspection for the removal of invader species. • On closure Department of Water and Sanitation will be consulted in aiding with the rehabilitation of the facility	• Adherence to rehabilitation standards. • Avoid ground sterilization and/or disturbance of vegetation re-growth • Remedying compacted areas to prevent erosion and promote vegetation re-growth • Adherence to rehabilitation standards. • Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment • Adherence to rehabilitation standards.	• Decommissioning of activity • Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Decommissioning of activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity

			• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species esta-blishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity
Plant site *Vibrating Screen* *Bourevestnik X-Ray plant* *Conveyor/s*	Construction	0.1 ha	• Only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • No indigenous shrubs or trees will be unnecessarily uprooted • A qualified Archaeologist must monitor site establishment • All infrastructure will be equipped with appropriate signs indicating function and potential dangers	• Minimizing unnecessary vegetation loss • Promote animal conser-vation in minimizing loss of animal life • Minimizing unnecessary vegetation loss and preservation species • Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance • Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Commencement of activity. • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity

	Operational		• When working on equipment outside the workshop the appropriate measures needs to be implemented to prevent chemical spillage	• Avoiding hydro-carbon fluid spillage causing soil sterilization	• Integrated into activity
			• No vehicle repairs and maintenance will occur within the operational area and will be restricted to the workshop.	• Preventing hydro-carbon fluid spillage and scattered waste metals	• Integrated into activity
			• Old diesel and related chemicals must be discarded within appropriate marked close containers and stored in the chemical storage facility till removal thereof	• Avoiding hydro-carbon fluid spillage causing soil sterilization.	• Integrated into activity • Decommissioning of activity
			• On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there off. Stored topsoil / tailings will be evenly spread to the recover the area	• Avoid ground sterilization and/or disturbance of vegetation re-growth • Adherence to rehabilitation standards.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The area must be continuously inspected for spillages and remediated immediately.	• Managing and avoidance of hydro-carbon fluid spillage causing soil sterilization	• Integrated into activity • Decommissioning of activity
			• All vehicle traffic are restricted to the roads and demarcated traffic areas	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Washing of equipment shall be restricted to urgent maintenance requirements only.	• Avoiding hydro-carbon fluid spillage as far as possible	• Integrated into activity
			• No indigenous shrubs or trees will unnecessarily uprooted and used for fire wood	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity • Decommissioning of activity

			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended.	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner.	• Preventing unnecessary stress in animals, loss of life and/or employee injury	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Strict adherence to the mine roads and no off-road driving to prevent trampling of vegetation and ground compaction	• Avoiding vegetation loss and ground compactions, which can lead to ground erosion	• Integrated into activity • Decommissioning of activity
			• A site will be identified and colour coded water tanks will be erected for safe human consumption.	• Health and Safety objective in preventing injury to personnel and/or public individuals	• Commencement of activity. • Integrated into activity
			• The mine shall be responsible for compliance with the relevant legislation in respect to noise.	• Minimizing noise distur-bance having an impact on farm owners and fauna	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Hearing protection will be made available to all employees where attenuation cannot be implemented.	• Health and Safety objective in preventing injury to personnel and/or public individuals	• Integrated into activity
			• Every vehicle in operation will be equipped with a silencer on the exhaust system.	• Health and Safety requirement preventing hearing loss of employees	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Integrated into activity • Decommissioning of activity

			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environmental conservation.	• Commencement of activity. • Integrated into activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Hard hats, earplugs, safety glasses, dust masks, gloves, hard point boots, reflector vests and reflective overalls is compulsory before entering this area.	• Health and Safety requirement preventing employee injury and/or possible loss of life	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The entrance will be clearly marked will all regulatory signs, to indicate a potential dangerous zone. • Related waste / scrap must be dispose of in the appropriate manner	• Health and Safety as well and Mineral Act requirement preventing public individual injury	• Integrated into activity • Decommissioning of activity
	Decommissioning		• All structures will be broken down and removed from site.	• Rehabilitation needs to be done to comply with closure objectives	• Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Integrated into activity • Decommissioning of activity

			• Topsoil will be replaced immediately (14 days) on an area when backfilling is complete. • No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed. • Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion. • Regular inspection for the removal of invader species.	• Environmental closure objective • Adherence to rehabilitation standards. • Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment	• Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity • Decommissioning of activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats. • Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species establishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity • Decommissioning of activity

Ablution facility	Construction	0.0008 ha	• Only necessary vegetation will be cleared	• Minimizing unnecessary vegetation loss	• Commencement of activity. • Integrated into activity
			• On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species	• Promote animal conser-vation in minimizing loss of animal life	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• Concealed septic tanks must be installed above ground, where it can be regularly inspected for leakage	• For the ease of maintenance and leakage can be seen immediately	• Commencement of activity. • Integrated into activity
	Operational		• Ablution blocks shall be at all times be sanitized	• Health and Safety issue, avoiding the spread of human diseases	• Commencement of activity • Integrated into activity
			• Sanitary bins will be provided and no sanitary material will be allowed within the septic tanks	• Preventing the burst of the septic tank as well as littered materials creating health risks	• Commencement of activity • Integrated into activity
			• All human waste and related waste will be contained within septic tanks installed for this purpose	• Promoting environmental health by avoiding the spread of diseases and parasites	• Integrated into activity
			• Septic tanks and chemical toilets will be chemically treated and maintained by a contracting agency	• Health and safety related preventing spillage and ground contamination	• Integrated into activity
			• Sanitary material within the bins provided will be closed in colour plastics and disposed of as domestic waste or removed by the agency responsible for the facility	• Preventing littered mate-rials creating health risks and separation from nor-mal domestic wastes	• Integrated into activity • Decommissioning of activity

			• Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner.	• Preventing unnecessary stress in animals, loss of life and/or employee injury	• Integrated into activity
			• Littering of any product, including cigarette buds shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and unnecessary environmental degradation	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environ-mental conservation.	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
			• The entrance will be clearly marked with all regulatory signs	• Regulatory requirement to indicate structure function	• Commencement of activity
	Decommissioning		• All structures will be broken down and removed from site.	• Rehabilitation needs to be done to comply with closure objectives	• Decommissioning of activity
			• All spills will be rehabilitated immediately	• Prevent the degradation of environmental health	• Integrated into activity • Decommissioning of activity
			• Rip and rehabilitate all compacted areas.	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity
			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Decommissioning of activity • Closure of activity

	After closure		• A 2 – 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Closure of activity
Vehicle parking		0.0308 ha			
Parking lot Wash bay Parts storeroom	Construction	0.02 ha 0.006 ha 0.0048 ha	• A cement floor will be casted with a waste trap for polluted water. • Parts storeroom will have a concrete floor within a bunker bay that can prevent spilled fluids from contaminating surrounding soils. • Roof over wash bay	• Management of possible hydro-carbon spillage causing soil sterilization. • Avoiding hydro-carbon fluid spillage as far as possible. • Prevention of possible stormwater contamination.	• Commencement of activity • Commencement of activity • Commencement of activity • Integrated into activity
	Operational		• Drip pans will be readily available and no parked vehicle will be without a drip pan. • No vehicle repairs and maintenance will occur within the operational area as far as possible. • Old diesel and related chemicals must be discarded within appropriate marked close containers • On accidental spillage the contaminated soil will be removed and appropriately stored till the removal there off.	• Avoiding hydro-carbon fluid spillage causing soil sterilization • Preventing hydro-carbon fluid spillage and scat-tered waste metals • Avoiding hydro-carbon fluid spillage as far as possible • Avoid ground sterilization and/or disturbance of vegetation re-growth	• Commencement of activity • Integrated into activity • Integrated into activity • Integrated into activity • Decommissioning of activity • Integrated into activity

			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or distur-bance of vegetation re-growth	• Integrated into activity
			• Suppression of dust on cleared areas will occur by the spraying water when necessary.	• Preventing and/or mini-mizing dust upliftment protecting the air quality as far as possible	• Integrated into activity
			• Littering of any product, including cigarette buds shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is it still the mine's ultimate responsibility in regard to environmental conservation	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Commencement of activity • Integrated into activity
	Decommissioning		• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Rip and rehabilitate all compacted areas	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity

			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Closure of activity
	After closure		• A 2 – 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Closure of activity
Temporary workshop facility	Construction	0.0025 ha	• The workshop will be barnlike temporary construction with a cement floor • The only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • No indigenous shrubs or trees will be unnecessarily uprooted • A qualified Archeologist must monitor site establishment	• Avoiding hydro-carbon fluid spillage causing soil sterilization • Minimizing unnecessary vegetation loss • Promote animal conser-vation in minimizing loss of animal life • Minimizing unnecessary vegetation loss and preservation species • Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity • Commencement of activity. • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity • Commencement of activity. • Integrated into activity
	Operational		• All chemical spillage on the floor will be treated to break them down into the natural components before cleaning the floor.	• Avoiding hydro-carbon fluid spillage causing soil sterilization.	• Integrated into activity

			• All diesel, oil and/or related chemicals must be discarded in an appropriate marked closed container and stored in the chemical warehouse till the removal thereof.	• Avoiding hydro-carbon fluid spillage as far as possible.	• Integrated into activity
			• Unusable vehicle and machinery parts will be discarded in a container supplied	• Preventing scattered waste metals	• Integrated into activity
			• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The exploration company shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environ-mental conservation.	• Integrated into activity • Decommissioning of activity
			• The exploration company shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas.	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The entrance will be clearly marked will all regulatory signs, to indicate a potential dangerous zone.	• Health and Safety as well and Mineral Act requirement preventing public individual injury	• Commencement of activity. • Integrated into activity • Decommissioning of activity

	Decommissioning		• All structures will be broken down and removed from site.	• Rehabilitation needs to be done to comply with closure objectives	• Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Prevent the degradation of environmental health	• Integrated into activity • Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity
			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
			• Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion.		
			• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
			• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation.		• Decommissioning of activity

			• A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity
Storage facility	Construction		• Parts storeroom will have a concrete floor within a bunker bay that can prevent spilled fluids from contaminating surrounding soils.	• Avoiding hydro-carbon fluid spillage as far as possible.	• Commencement of activity
	Operational		• Stored chemicals must be in marked closed containers	• Chemical storing protocol, indicating danger and remediation steps	• Commencement of activity • Integrated into activity
			• For remediation purposes a neutralizing agent for each chemical must be available at all times	• Minimizing soil loss to neutralize rather than remove	• Commencement of activity • Integrated into activity
			• Un-used chemicals must be separated from used chemicals as well as each type of chemical will be group to prevent cross-contamination	• Avoid fire hazard as some chemicals may react with each other	• Commencement of activity • Integrated into activity
			• Chemicals removed from storage will be in approved containers to minimize the possibility of spillage	• Prevent spillage and ground contamination	• Integrated into activity
			• Fire extinguishers for this purpose will be available at all times	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Integrated into activity
			• Chemical and chemical containing waste will be stored in closed containers.	• Chemical handling proto-col avoiding spillage and ground contamination	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environ-mental conservation	• Integrated into activity • Decommissioning of activity

			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
	Decommissioning		• With decommissioning of the mine the contractor is responsible for removing his own chemical products.	• Avoiding environmental contamination also reha-bilitation requirement in complying with closure objective.	• Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
Diesel storage	Construction		• Diesel cart will be equipped a leak-proof bay, supporting the tank volume plus 10%.	• Avoiding hydro-carbon fluid spillage causing ground sterilization that can lead to erosion	• Commencement of activity
			• Will stand on a impervious sheet	• Further fluid spillage prevention	
	Operational		• Vehicles which are filled with fuel will park on a plastic sheet / floor for if any spillage occurs it can be cleaned	• Avoid hydro-carbon fluid spillage as far as possible causing ground sterilization	• Integrated into activity
			• Two fire extinguishers will be present at all times	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Commencement of activity • Integrated into activity
			• The area must be continuously inspected for spillages and remediated immediately	• Minimize the probability of soil pollution, ground sterilization and/or distur-bance of vegetation re-growth	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the	• With all measures in place is the mine still ultimately	• Integrated into activity • Decommissioning of activity

			failure by his employees or suppliers. • The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	responsible for environ-mental conservation • Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity • Integrated into activity
	Decommissioning		• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
	After closure		• A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation	• Environmental closure objective to create a sustainable environment after closure	• Closure of activity
Domestic waste facility	Construction	0.0008 ha	• Waste containers must be of municipal approved standard with a lid and scavenger proof • Construction near offices	• Avoid windblown litter and/or protection against scavengers • Minimizing overall footprint of operations	• Commencement of activity • Integrated into activity • Commencement of activity
	Operational		• Domestic waste will be kept in closed marked containers. • Containers will be removed on a daily basis. • Domestic waste will be dumped at a registered site for such disposal. • The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• Avoid windblown litter and/or protection against scavengers • Waste handling protocol in keeping the environment clean • Waste management protocol in preventing un-necessary litter pollution • With all measures in place it is still the mine's responsibility to ensure environmental conservation	• Commencement of activity • Integrated into activity • Integrated into activity • Integrated into activity • Decommissioning of activity • Integrated into activity • Decommissioning of activity

	Decommissioning		• With decommissioning of the mine, the contractors and mine employees will be responsible for the safe removal thereof.	• Avoiding litter pollution also rehabilitation requirement in complying with closure objective.	• Integrated into activity • Decommissioning of activity
Powerline	Construction		• Only the necessary vegetation will be disturbed	• Minimizing unnecessary vegetation loss	• Commencement of activity.
	Operational		• Regular inspection for integrity of the cable casing	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas.	• Integrated into activity
				• Health and Safety re-quirement preventing employee injury and/or possible loss of life	• Integrated into activity
			• If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended	• Managing vegetation re-growth and promoting indigenous species esta-blishment	• Integrated into activity • Decommissioning of activity
	Decommissioning		• All structures will be broken down and removed from site.	• Rehabilitation needs to be done to comply with closure objectives	• Decommissioning of activity
			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
	After closure		-	-	-
Security points	Construction		• All structures will consist of appropriate signs indicating function	•	• Commencement of activity
			• The only necessary vegetation will be cleared	• Minimizing unnecessary vegetation loss	• Commencement of activity. • Integrated into activity

			• On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species	• Promote animal conservation in minimizing loss of animal life	• Commencement of activity. • Integrated into activity
			• No indigenous shrubs or trees will be unnecessarily uprooted	• Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity. • Integrated into activity
			• A registered Archaeologist must monitor site establishment	• Avoiding the destruction of any objects and/or structures of Archeological and/or cultural significance	• Commencement of activity. • Integrated into activity
	Operational		• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• Health and safety as well as NEMA requirement ensuring good air quality and preventing related lung illnesses	• Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Commencement of activity • Integrated into activity • Decommissioning of activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environmental conservation.	• Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Integrated into activity • Decommissioning of activity
			• Fire extinguishers will be kept in good order and serviced regularly.	• Preventing fires that may lead to run-away field fires causing severe vegetation loss over vast areas	• Integrated into activity

			• The entrance will be clearly marked will all regulatory signs, to indicate a potential dangerous zone.	• Health and Safety as well and Mineral Act requirement preventing public individual injury	• Integrated into activity
	Decommissioning		• All structures will be broken down and removed from site.	• Rehabilitation needs to be done to comply with closure objectives	• Decommissioning of activity
			• All chemical spills will be rehabilitated immediately	• Prevent the degradation of environmental health	• Integrated into activity • Decommissioning of activity
			• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity
			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
			• Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion.		• Decommissioning of activity
			• Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats.	• Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Closure of activity

			• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species esta-blishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity
Storm water control	Construction		• The only necessary vegetation will be cleared • On vegetation clearing should any nests with chicks or eggs be discovered a local nature conservation officer shall be called to relocate the species • Only earth materials will be used in the channeling of run-off water	• Minimizing unnecessary vegetation loss • Promote animal conserva-tion in minimizing loss of animal life. • Adherence to rehabilitation standards.	• Commencement of activity. • Commencement of activity. • Commencement of activity. • Integrated into activity
	Operational		• Earth materials will be used in the prevention of erosion channels • If any invader species are observed the reporting thereof to the rehabilitation site manager is highly recommended. • Employees will be advised to stay clear from any wild animals or reptiles and not to disturb or provoke them in any manner • Littering of any product, including cigarette buds, at any site shall be seen as an offence and will not be tolerated	• Adherence to rehabilitation standards. • Managing vegetation re-growth and promoting indigenous species esta-blishment • Preventing unnecessary stress in animals, loss of life and/or employee injury. • Avoid possible animal suffering and scenery degradation	• Commencement of activity. • Integrated into activity • Integrated into activity • Decommissioning of activity • Commencement of activity. • Integrated into activity • Decommissioning of activity • Integrated into activity

			• The mine shall be responsible for any clean up resulting from the failure by his employees or suppliers. • The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• With all measures in place is the mine still ultimately responsible for environmental conservation. • Forming part of the mine's Environmental Awareness initiative and strategies	• Integrated into activity • Decommissioning of activity • Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• All structures will be broken down. • Compacted areas will be ripped to a depth of 300 mm to provide a growth medium • Regular inspection for the removal of invader species.	• Adherence to rehabilitation standards. • Remedying compacted areas to prevent erosion and promote vegetation re-growth • Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Decommissioning of activity • Decommissioning of activity
	After closure		• Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species establishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity

Access and Hauling Roads	Construction	0.4 ha	• As far as possible will the mine make use of existing farm roads. • Roads and the number of roads will be planned and constructed with the minimal impact on the environment • No foreign materials will be used in the construction of roads • No indigenous trees or shrubs will be unnecessarily uprooted • Roads will be marked with the appropriate signs for safety.	• Avoid ground sterilization and/or disturbance of vegetation re-growth. • Avoid ground sterilization and/or disturbance of vegetation re-growth. • Prevent ground sterilization • Minimizing unnecessary vegetation loss and preservation species	• Commencement of activity • Integrated into activity • Decommissioning of activity • Commencement of activity • Commencement of activity • Integrated into activity • Commencement of activity • Integrated into activity • Commencement of activity • Integrated into activity
	Operational		• Access and hauling roads shall be maintained for the duration of the project • All vehicular traffic is restricted to the roads and to a speed of 20 km/h for heavy vehicles and 40 km/h for light weight vehicles • Strict adherence to the mine roads and no off-road driving to prevent trampling of vegetation and ground compaction • No vehicle repairs and maintenance will occur within the operational area and will be restricted to the workshop	• Adherence to rehabilitation standards. • Forming part of the mine's Environmental Awareness initiative and strategies • Health and safety as well as NEMA requirement ensu-ring good air quality and preventing related lung illnesses • Avoid ground sterilization and/or disturbance of vegetation re-growth. • Preventing hydro-carbon fluid spillage and scattered waste metals	• Integrated into activity • Integrated into activity • Integrated into activity • Integrated into activity

			• On accidental spillage shall the contaminated soil be removed and appropriately stored till the removal there off	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity
			• Suppression of dust on cleared areas will occur by the spraying of chemical bounded / fresh water.	• Preventing and/or mini-mizing dust generation, protecting the air quality as far as possible	• Integrated into activity
			• Littering of any product, including cigarette buds, at any operational site shall be seen as an offence and will not be tolerated	• Avoid possible animal suffering and scenery degradation	• Integrated into activity
			• The mine shall be responsible for any cleaning up resulting from the failure by his employees or suppliers.	• With all measures in place is the mine still ultimately responsible for environ-mental conservation	• Commencement of activity. • Integrated into activity • Decommissioning of activity
			• The mine shall ensure that all suppliers and the delivery drivers are aware of procedures and restrictions in terms of this document.	• Forming part of the mine's Environmental Awareness initiative and strategies	• Commencement of activity. • Integrated into activity • Decommissioning of activity
	Decommissioning		• All chemical spills will be rehabilitated immediately	• Avoid ground sterilization and/or disturbance of vegetation re-growth	• Integrated into activity • Decommissioning of activity
			• Compacted areas will be ripped to a depth of 300 mm to provide a growth medium	• Remedying compacted areas to prevent erosion and promote vegetation re-growth	• Decommissioning of activity
			• No hill and valley contouring that can create a small surface catchment area without a natural drainage outlet will be formed.	• Adherence to rehabilitation standards.	• Integrated into activity • Decommissioning of activity

			• Areas will be seeded with a seed mixture reflecting the natural vegetation as is currently found. • Branches of the invasive trees will be used to protect emerging seedlings, to retain soil moisture and prevent soil erosion. • Regular inspection for the removal of invader species.	• Managing vegetation re-growth and promoting indigenous species establishment • Managing vegetation re-growth and promoting indigenous species establishment	• Decommissioning of activity • Decommissioning of activity • Decommissioning of activity
	After closure		• All new vegetated areas will be protected against grazing cattle, sheep or goats. • Monitoring of the rehabilitation area will take place every six months until mine closure. Special attention will be given to basal and crown cover, species diversity and the vitality of the vegetation. • A 2 to 3 year after care plan is initiated to ensure a satisfying vegetation re-growth rate and the successful establishment of indigenous vegetation.	• Managing vegetation re-growth and promoting indigenous species establishment • Environmental closure objective to create a sustainable environment after operations.	• Decommissioning of activity • Decommissioning of activity • Decommissioning of activity

OTHER MITIGATION MEASURES NOT LISTED WITH LISTED ACTIVITIES

- Vehicles will be equipped with a red flag on a long enough rod to be easily observed by the heavy vehicle drives and a roll bar
- Personnel will need to be trained on health and safety matters in line with the Health and Safety Act for mining and in the handling and remediation of chemical spills, fire and first aid
- Daily checking of oil/diesel leakages before any vehicle is operated
- Waste storage containers shall be covered, tip-proof, weather proof and scavenger proof
- The mine shall ensure that all facilities are maintained in a neat and tidy condition and the site shall be kept fee of litter
- No burning, on site burring or dumping of waste material, inclusive of receptacles, scrap, rubble, and tyres, shall occur

- Contracts with the local municipality / agencies will be signed for the removal of waste containers on an appropriate schedule of once a week, but if found necessary twice a week
- Access road maintenance throughout the entire project timeframe
- A complaints register must be implemented and issues raised must be addressed in a scheduled meeting with all relevant interested and/or affected parties.
- No development of temporary or permanent infrastructure will be allowed within the 100 m floodline of any major and perennial drainage channels
- Valid permits from the Limpopo nature Conservation will be obtained before any protected plant species are removed. On removal of these species will a co-ordinated point be logged and mapped. Once the area has been rehabilitated seedlings of these species will be replanted on that specific point and growth monitored.
- If any endangered animal species are encountered at least two of the Nature Conservation Departments will be contacted and informed of the animal/s encountered and its current state and whereabouts
- No mining or mining related activities will be conducted in areas of graves and burial sites, Archaeological and paleontological sites as well as areas or sites of special scientific interest.
- Any mining activity planned in the 100 m floodline will be subjected to an NWA Section 21 (c) and (i) Authorization from the Department of Water and Sanitation
- All spray lights for roads and where infrastructure is located will be positioned in such a way that the beam of light and its reflection is away for the R31 public road.

e) Impact Management Outcomes

Description of impact management outcomes, identifying the standard of impact management required for the aspects contemplated in paragraph ();

ACTIVITY Whether listed or not listed. (E.g. Excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyers, etc... etc.... etc.).	**POTENTIAL IMPACT** (E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc... etc... etc.	**ASPECTS AFFECTED**	**PHASE** In which impact is anticipated (e.g. Construction, commissioning, operational, decommissioning, closure, post-closure)	**MITIGATION TYPE** (modify, remedy, control, or stop) Through (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. • Modify through alternative method • Control through noise control • Controlling through management and monitoring • Remedy through rehabilitation.	**STANDARDS TO BE ACHIEVED** (Impact avoided, noise levels, dust levels, rehabilitation standards, end use objectives etc.)
Geological investigation	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		-	-
	Grazing field	Loss		-	-
	Vegetation	Loss/disturbance		Traffic restriction to roads Vegetation clearing control Rehabilitation	Impact avoided Impact minimized Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Storm water		-	-
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		-	-
	Visual impact	Scenery loss		Rehabilitation	Impact remedied

	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		-	-
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
INITIAL DRILLING					
Drilling	Vegetation	Loss	Construction	Vegetation clearing control Rehabilitation	Impact minimized Impact remedied
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Rehabilitation Soil pollution control Chemical handling protocol	Impact remedied Impact managed Impact avoided
	Grazing field	Loss		Rehabilitation	Impact remedied
	Vegetation	Loss/disturbance		Traffic restriction to roads Vegetation clearing control Rehabilitation	Impact avoided Impact minimized Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna	Migration		Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		Operations during office hours Silencer systems on vehicles	Impact minimized Impact minimized
	Air quality	Degradation		Dust control	Impact minimized
	Archaeological items	Degradation		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Avoid significant sensitive sites	Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Sampling	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		-	-
	Grazing field	Loss		Vegetation clearing control Rehabilitation	Impact minimized Impact remedied
	Vegetation	Loss/disturbance		-	-
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		-	-
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		Avoid significant sensitive sites	Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Ablution	Vegetation	Loss	Construction	Vegetation clearing control	Impact avoided
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Facility maintenance Immediate rehabilitation Regular inspections	Impact avoided Impact remedied Impact managed
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		Waste management	Impact avoided

	Water quality	Wastewater		Wastewater management Regular septic tank draining	Impact managed Impact avoided
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		Adhere to mitigation measures	Impact mitigated
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Vehicle storage	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Impact managed Impact remedied Impact avoided Impact avoided
	Grazing field	Loss		-	-
	Vegetation	Loss/disturbance		-	-
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		Waste management	Impact avoided
	Water quality	Storm water		Storm water control Soil pollution management	Impact minimized Impact managed
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		-	-
	Visual impact	Scenery loss		-	-
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards

	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Chemical storage	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation	Impact remedied
				Regular inspections	Impact managed
				Adhere to mitigation measures	Impact mitigated
				Bunker-bay installation	Impact avoided
				Chemical handling protocol	Impact avoided
	Grazing field	Loss		-	-
	Vegetation	Loss/disturbance		-	-
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		-	-
	Water quality	Storm water		-	-
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		-	-
	Visual impact	Scenery loss		-	-
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Diesel storage	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Regular inspections	Impact managed
				Immediate rehabilitation	Impact remedies
				Bunker-bay installation	Impact avoided
				Adhere to mitigation measures	Impact mitigated
	Grazing field	Loss		-	-

	Vegetation	Loss/disturbance		-	-
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna	Migration		-	-
	Water quality	Storm water		Storm water control Soil pollution management	Impact minimized Impact managed
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-
	Sensitive landscapes	Destruction		Avoid significant sensitive sites Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		-	-
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Domestic waste facility	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		-	-
	Grazing field	Loss		-	-
	Vegetation	Loss/disturbance		-	-
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Report to rehabilitation officer	Impact minimized Impact managed
	Fauna	Migration		Immediate clean-up Adhere to mitigation measures Fencing of site	Impact minimized Impact mitigated Impact avoided
	Water quality	Storm water		-	-
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Degradation		-	-

	Sensitive landscapes	Destruction		Avoid significant sensitive site Adhere mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Waste management Litter pollution management Rehabilitation	Impact managed Impact managed Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
BULK SAMPLING					
Bulk Sample excavation	Vegetation	Loss	Construction	Vegetation clearing control Restriction to roads	Impact minimized Impact avoided
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Immediate rehabilitation Continuous inspection Vehicle maintenance	Impact remedied Impact managed Impact avoided
	Grazing field	Loss		Traffic restriction to roads Vegetation clearing control Rehabilitation	Impact avoided Impact minimized Impact remedied
	Vegetation	Loss/disturbance		Traffic restriction to roads Vegetation clearing control Rehabilitation	Impact avoided Impact minimized Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna	Migration		Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Storm water		-	-
	Noise	Elevated levels		Operations during office hours Silencer systems on vehicles	Impact minimized Impact minimized

	Air quality	Degradation		Dampening of mine roads Speed restrictions	Impact managed Impact minimized
	Archaeological items	Degradation		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Impact remedied Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Topsoil	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Rehabilitation Continuous inspections	Impact remedied Impact managed
	Grazing field	Loss		Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Impact minimized Impact avoided Impact remedied
	Vegetation	Loss/disturbance		Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Impact minimized Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspection Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna			-	-
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		Protect against wind erosion	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Impact remedied Impact mitigated Impact avoided

	Visual impacts	Scenery loss		Rehabilitation Specified dump height	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Overburden	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Rehabilitation Regular inspections	Impact remedied Impact managed
	Grazing field	Loss		Rehabilitation Traffic restriction to cleared areas Vegetation clearing control	Impact remedied Impact avoided Impact minimized
	Vegetation	Loss/disturbance		Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Impact minimized Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspection Report to rehabilitation manager	Impact minimized Impact managed Impact managed
	Fauna			-	-
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		Protect against wind erosion	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Impact remedied Impact mitigated Impact avoided
	Visual impacts	Scenery loss		Rehabilitation Specified dump height	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards

	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Stockpiles	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Immediate rehabilitation Regular inspections	Impact remedied Impact managed
	Grazing field	Loss		Rehabilitation Vegetation clearing control Restriction to cleared areas	Impact remedied Impact minimized Impact avoided
	Vegetation	Loss/disturbance		Vegetation clearing control Restriction to cleared areas Rehabilitation	Impact minimized Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna			-	-
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		Operations within office hours Silencer systems on vehicles	Impact minimized Impact minimized
	Air quality	Degradation		Dampening of mine roads	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Impact remedied Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation Specified dump height	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Waste dumps	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		Immediate rehabilitation Continuous inspection	Impact remedied Impact managed
	Grazing field	Loss		Rehabilitation Vegetation clearing control Restriction to cleared areas	Impact remedied Impact minimized Impact avoided
	Vegetation	Loss/disturbance		Restriction to cleared areas Vegetation clearing control Rehabilitation	Impact avoided Impact minimized Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Regular inspections Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna	Migration		-	-
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		Operations within office hours Silencer systems on vehicles	Impact minimized Impact minimized
	Air quality	Degradation		Dampening of exposed area	Impact minimized
	Archaeological items	Loss		Avoid significant sensitive sites	Impact avoided
	Sensitive landscape	Destruction		Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Impact remedied Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation Specified dump height	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Loading and hauling	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections Vehicle maintenance	Impact remedied Impact managed Impact avoided
	Grazing field	Loss		Restriction to roads Continuous rehabilitation	Impact avoided Impact remedied
	Vegetation	Loss/disturbance		Restriction to mine roads Continuous rehabilitation	Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspection Reporting to environmental officer	Impact minimized Impact managed Impact managed
	Fauna			Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Storm water		-	-
	Noise	Elevated levels		Operations during office hours Silencer systems on vehicles	Impact minimized Impact minimized
	Air quality	Degradation		Speed restriction	Impact minimized
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		-	-
	Visual impact	Scenery loss		Speed restrictions Minimal traffic possible	Impact minimized Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Office block	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections	Impact remedied Impact managed

	Grazing field	Loss		Rehabilitation Traffic restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Traffic restriction to cleared areas Rehabilitation	Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to environmental officer	Impact minimized Impact managed Impact managed
	Fauna			Waste management	Impact avoided
	Water quality	Waste water		-	-
	Noise	Elevated levels		Operations during office hours	Impact minimized
	Air quality	Degradation		Dampening of exposed areas Speed restrictions	Impact minimized Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Plant site	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Machine maintenance Immediate rehabilitation Regular inspection Chemical handling control	Impact avoided Impact remedied Impact managed Impact avoided
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact managed
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact managed
	Water table	Depressed		-	-

	Vegetation	Invader plants		Regular removal Continuous inspections Reporting to environmental officer	Impact minimized Impact managed Impact managed
	Fauna			Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Storm water		Storm water control Soil pollution control	Impact minimized Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		Dampening of exposed area	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Mineral processing	Vegetation	Loss	Construction	-	-
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Vehicle maintenance Immediate rehabilitation Regular inspection Chemical handling control	Impact avoided Impact remedied Impact managed Impact avoided
	Grazing field	Loss		Restriction to cleared areas Rehabilitation	Impact avoided Impact remedied
	Vegetation	Loss/disturbance		Restriction to cleared areas Rehabilitation	Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to environmental officer	Impact remedied Impact managed Impact managed
	Fauna			Noise level control Waste management	Impact minimized Impact avoided
	Water quality	Waste water		-	-

	Noise	Elevated levels		Operations during office hours Silencer systems on vehicles	Impact minimized Impact minimized
	Air quality	Degradation		Dampening of exposed areas Speed restrictions Spraying systems on conveyors	Impact minimized Impact minimized Impact minimized
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		-	-
	Visual impact	Scenery loss		Dust control	Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Ablution	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Facility maintenance Immediate rehabilitation Regular inspections	Impact avoided Impact remedied Impact managed
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna			Waste management	Impact avoided
	Water quality	Waste water		Waste water management Regular septic tank draining	Impact managed Impact managed
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards

	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Vehicle parking lot	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Impact managed Impact remedied Impact avoided Impact avoided
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Restriction to cleared areas Rehabilitation	Impact avoided Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to environmental officer	Impact remedied Impact managed Impact managed
	Fauna			Waste management	Impact avoided
	Water quality	Loss		Storm water control Soil pollution management	Impact minimized Impact minimized
	Noise	Elevated levels		Silencer systems on vehicles	Impact minimized
	Air quality	Degradation		Dampening of cleared areas	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscapes	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Wash bay	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections Adhere to mitigation measures	Impact remedied Impact managed Impact mitigated
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Report to environmental officer	Impact minimized Impact managed
	Fauna			Operations within office hours Waste management	Impact minimized Impact avoided
	Water quality	Waste water		Waste water management Draining/cleaning of waste water Biodegradable detergents	Impact managed Impact remedied Impact minimized
	Noise	Elevated levels		Operations during office hours	Impact minimized
	Air quality	Degradation		-	-
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation Waste/metal management	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Parts store room	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections Adhere to mitigation measures	Impact remedied Impact managed Impact mitigated
	Grazing field	Loss		Rehabilitation	Impact remedied
	Vegetation	Loss/disturbance		Rehabilitation	Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Report to environmental officer	Impact minimized Impact managed
	Fauna			-	-
	Water quality	Storm water		Storm water control Soil pollution management	Impact minimized Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		Dampening of exposed area	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation Waste/meatal management	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Temporary Workshop facility	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections Adhere to mitigation measures	Impact remedied Impact managed Impact mitigated
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided

	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Report to environmental officer	Impact remedied Impact managed
	Fauna			Operations within office hours Waste management	Impact minimized Impact avoided
	Water quality	Waste water		Waste water management Draining/cleaning of waste water	Impact managed Impact remedied
	Noise	Elevated levels		Operations during office hours	Impact minimized
	Air quality	Degradation		Dampening of exposed area	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Adhere to mitigation measures Avoid significant sensitive sites	Impact mitigated Impact avoided
	Visual impact	Scenery loss		Rehabilitation Waste/metal management	Impact remedied Impact minimized
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Storage facility	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker-bay installations Chemical handling control	Impact remedied Impact managed Impact mitigated Impact avoided Impact avoided
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-

	Vegetation	Invader plants		Regular removal Report to rehabilitation officer	Impact minimized Impact managed
	Fauna			Operations during office hours Waste management	Impact minimized Impact avoided
	Water quality	Storm water		Storm water control Waste water management Draining/cleaning of waste water	Impact minimized Impact managed Impact remedied
	Noise	Elevated levels		-	-
	Air quality	Degradation		Dampening of cleared areas	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Avoid significant sensitive sites Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Rehabilitation Waste/metal management	Impact remedied Impact avoided
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Diesel storage	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Impact managed Impact remedied Impact avoided Impact mitigated
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		Regular removal Continuous inspections Report to rehabilitation officer	Impact minimized Impact managed Impact managed
	Fauna			-	-

	Water quality	Storm water		Storm water control Soil pollution management	Impact minimized Impact minimized
	Noise	Elevated levels		Operations during office hours	Impact minimized
	Air quality	Degradation		Dampening of exposed areas	Impact minimized
	Archaeological items	Loss		Avoid sites of significance	Impact avoided
	Sensitive landscape	Destruction		Avoid sites of significance Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Domestic waste facility	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil / Litter	Pollution		Immediate clean-up Continuous inspections	Impact remedied Impact managed
	Grazing	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna			Adhere to mitigation measures Immediate clean-up Fencing of site	Impact mitigated Impact avoided Impact avoided
	Water quality	Storm water		Storm water control	Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		Avoid significant sensitive sites Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Waste management Litter pollution management Rehabilitation	Impact managed Impact managed Impact remedied

	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standard	Impact remedied
Power lines	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		-	-
	Grazing	Loss		Rehabilitation	Impact remedied
	Vegetation	Loss/disturbance		Rehabilitation	Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna			-	-
	Water quality	Storm water		-	-
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		-	-
	Visual impact	Scenery loss		-	-
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Security points	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		Regular inspections Immediate rehabilitation Littering control	Impact managed Impact remedied Impact avoided
	Grazing field	Loss		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Vegetation	Loss/disturbance		Rehabilitation Restriction to cleared areas	Impact remedied Impact avoided
	Water table	Depressed		-	-

	Vegetation	Invader plants		Regular removal Report to rehabilitation officer	Impact minimized Impact managed
	Fauna			-	-
	Water quality	Storm water		Storm water control Soil pollution management	Impact minimized Impact minimized
	Noise	Elevated levels		Operations during office hours	Impact minimized
	Air quality	Degradation		Dampening of exposed areas	Impact minimized
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		Avoid significant sensitive sites Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied
Storm water control	Vegetation	Loss	Construction	Vegetation clearing control	Impact minimized
	Geological	Loss	Operational	-	-
	Topographic	Change		Rehabilitation	Impact remedied
	Soil	Pollution		-	-
	Grazing field	Loss		Rehabilitation	Impact remedied
	Vegetation	Loss/disturbance		Rehabilitation	Impact remedied
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna			-	-
	Water quality	Storm water		-	-
	Noise	Elevated levels		-	-
	Air quality	Degradation		-	-
	Archaeological items	Loss		-	-
	Sensitive landscape	Destruction		Avoid significant sensitive sites	Impact avoided
	Visual impact	Scenery loss		-	-
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

Access and Hauling roads	Vegetation	Loss	Construction	Vegetation clearing control Minimum roads possible	Impact minimized Impact avoided
	Geological	Loss	Operational	-	-
	Topographic	Change		-	-
	Soil	Pollution		-	-
	Grazing field	Loss		Rehabilitation Vegetation clearing control Restriction to roads	Impact remedied Impact minimized Impact avoided
	Vegetation	Loss/disturbance		Restriction to roads Rehabilitation Vegetation clearing control	Impact avoided Impact remedied Impact minimized
	Water table	Depressed		-	-
	Vegetation	Invader plants		-	-
	Fauna			-	-
	Water quality	Storm water		Storm water control Erosion control Soil pollution management	Impact minimized Impact managed Impact minimized
	Noise	Elevated levels		-	-
	Air quality	Degradation		Dampening of roads	Impact minimized
	Archaeological items	Loss		Restriction to roads Avoid significant sites	Impact avoided Impact avoided
	Sensitive landscape	Destruction		Avoid significant sensitive sites Adhere to mitigation measures	Impact avoided Impact mitigated
	Visual impact	Scenery loss		Rehabilitation	Impact remedied
	Waste	Disposal	Decommissioning	Management standards	Impact avoided
	Vegetation	Re-growth		Regular inspections	Rehabilitation standards
	Exposed area	Re-vegetation	After closure	Regular inspections	Rehabilitation standards
	Safety risks	Waste disposal		Closure standards	Impact remedied

f) Impact Management Actions

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved)

ACTIVITY Whether listed or not listed. (E.g. Excavations, blasting, stockpiles, discard dumps or dams, loading, hauling and transport, water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyers, etc... etc.... etc.)..	**POTENTIAL IMPACT** (E.g. dust, noise, drainage surface disturbance, fly rock, surface water contamination, groundwater contamination, air pollution etc... etc... etc.	**MITIGATION TYPE** (modify, remedy, control, or stop) Through (e.g. noise control measures, storm water control, dust control, rehabilitation, design measures, blasting controls, avoidance, relocation, alternative activity etc. etc) E.g. • Modify through alternative method • Control through noise control • Controlling through management and monitoring Remedy through rehabilitation.	**TIME PERIOD FOR IMPLEMENTATION** Describe the time period when the measures in the environmental management programme must be implemented. Measures must be implemented when required. With regard to Rehabilitation specifically this must take place at the earliest opportunity. With regard to Rehabilitation therefore state either:- Upon cessation of the individual activity Or Upon the cessation of mining, bulk sampling or alluvial diamond prospecting as the case may be.	**COMPLIANCE WITH STANDARDS** (A description of how each of the recommendations in 2.11.6 read with 2.12.and 2.15.2 herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)
Geological investigation	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	-	-	-
	Grazing loss	-	-	-
	Vegetation disturbance	Traffic restriction to roads Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Prevents the trampling of vegetation and compaction of ground
	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	Noise level control Waste management	Integrated into activity	Avoid unnecessary disturbance to the livestock and game
	Water quality loss	-	-	-
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-

	Archaeological items	-	-	-
	Sensitive landscape	-	-	-
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation.
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	-	-	-
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
INITIAL DRILLING				
Drilling	Vegetation loss	Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Rehabilitation Soil pollution control Chemical handling protocol	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds

	Vegetation disturbance	Traffic restriction to roads Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	Noise level control Waste management	Integrated into activity Decommissioning of activity	Minimizing the effect of the noise created by the operations on animals and surrounding environment
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity Decommissioning of activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Noise level control Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dust control	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity	Avoiding the degradation of the environment as well as the health of

			Decommissioning of activity	any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Sampling	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Minimizing the impact in trying to rectify and/or re-create the topography of the area.
	-	-	-	-
	Grazing loss	Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	-	-	-
	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity Decommissioning of activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	-	-	-

	Sensitive landscape	Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Ablution	Vegetation loss	Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Facility maintenance Immediate rehabilitation Regular inspections	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and remedying of spillage preventing any health effect that spillage may have on the environment
	Grazing loss	Rehabilitation Restriction to cleared areas	Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds

	Vegetation disturbance	Traffic restriction to roads Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	Waste management	Integrated into activity Decommissioning of activity	Waste management standards as well as sewerage management to avoid the risk it poses in regard to environmental health
	Water quality loss (waste water)	Waste water management Regular septic tank draining	Commencement of activity Integrated into activity Decommissioning of activity	Waste managing standards as well all sewerage must be treated at a registered facility as well as avoiding the risk it poses in regard to environmental health
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	-	-	-
	Sensitive landscape	Adhere to mitigation measures	Commencement of activity Integrated into activity Decommissioning of activity	Avoid the pollution, degradation and/or destruction of any significant sensitive landscapes
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standards in remedying the effect of the activity can prevent erosion channels forming degrading the scenery of the area.
	Waste disposal	Management standards	Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by human excretions (sewerage) and related wastes

	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Vehicle Storage	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Regular inspection Immediate rehabilitation Drip-tray installation Vehicle maintenance	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	-	-	-
	Vegetation disturbance	-	-	-
	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	Waste management	Integrated into activity Decommissioning of activity	Minimizing the effect of operations on animals and surrounding environment
	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity Decommissioning of activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-

	Archaeological items	-	-	-
	Sensitive landscape	-	-	-
	Visual impact	-	-	-
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Chemical storage	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker-bay installation Chemical handling protocol	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or remedying soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of storm water run-off
	Grazing loss	-	-	-
	Vegetation disturbance	-	-	-
	Depressed water table	-	-	-
	Invader plants	-	-	-

	Fauna	-	-	-
	Water quality loss (storm water)	-	-	-
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	-	-	-
	Sensitive landscape	-	-	-
	Visual impact	-	-	-
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by chemical and/or chemical containing waste
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Diesel storage	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-

	Soil pollution	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and remedying of spillage preventing sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	-	-	-
	Vegetation disturbance	-	-	-
	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding spillage and ground contamination preventing run-off storm water contamination as well as excessive erosion during such an event
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	-	-	-
	Sensitive landscape	Avoid significant sensitive sites Adhere to mitigation measures	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the activity may have on any sensitive areas.
	Visual impact	-	-	-
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by diesel and/or diesel containing waste
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Domestic waste facility	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	-	-	-
	Grazing loss	-	-	-
	Vegetation disturbance	-	-	-
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	Adhere to mitigation measures Immediate clean-up Fencing the site	Integrated into activity Decommissioning of activity	Avoiding and/or minimizing of littering will help to prevent animal suffering and even loss of life
	Water quality loss (storm water)	-	-	-
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	-	-	-
	Sensitive landscape	Avoid significant sensitive sites Adhere to mitigation measures	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect litter and litter pollution may have on sensitive landscapes
	Visual impact	Waste management Litter pollution management Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and managing the effect of scattered waste materials have on the scenery of the area and surrounding environment

	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by littered plastics and related waste materials
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with mitigation measures, rehabilitation standards and closure objectives by keeping the area litter free which may disrupt the re-growth and halter the growth of vegetation
	Area rehabilitation	Regular inspections Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by keeping the area litter free and in the same condition as before operations commenced.
BULK SAMPLING				
Bulk sample excavations	Vegetation loss	Vegetation clearing control Restriction to roads	Commencement of activity Integrated into activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standard in remedying the effect of the activity also prevent erosion channels forming degrading the natural topography
	Soil pollution	Immediate rehabilitation Continuous inspections Vehicle maintenance	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off

	Grazing loss	Traffic restriction to roads Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Traffic restriction to roads Vegetation clearing control Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	Noise level control Waste management	Integrated into activity Integrated into activity	Minimizing the effect of the noise created by the operations on animals and surrounding environment
	Water quality loss	-	-	-
	Noise disturbance	Operations during office hours Silencer systems on vehicles	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dampening of mine roads Speed restriction	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation

	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Topsoil dump	Vegetation loss	Vegetation clearing control	Commencement of activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standard in remedying the effect of the activity also prevent erosion channels forming degrading the natural topography
	Soil pollution	Rehabilitation Continuous inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off

	Grazing loss	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality loss	Protect against wind erosion	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Specified dump height	Integrated into activity Decommissioning of activity Closure of activity	Avoiding, minimizing and/or rectifying the loss of vegetation

	Waste disposal	Management standards	Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Overburden	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standard in remedying the effect of the activity also prevent erosion channels forming degrading the natural topography
	Soil pollution	Rehabilitation Regular inspection	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off

	Grazing loss	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Vegetation clearing control Traffic restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	Protection against wind erosion	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Specified dump height	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes

	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Stock piles	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standard in remedying the effect of the activity also prevent erosion channels forming degrading the natural topography
	Soil pollution	Immediate rehabilitation Regular inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Vegetation clearing control Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds

	Vegetation disturbance	Rehabilitation Vegetation clearing control Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours Silencer systems on vehicles	Commencement of activity Integrated into activity Decommissioning of activity	-
	Air quality degradation	Dampening of mine roads	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Specified dump height	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes

	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Waste dumps	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standard in remedying the effect of the activity also prevent erosion channels forming degrading the natural topography
	Soil pollution	Immediate rehabilitation Continuous inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Vegetation clearing control Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds

	Vegetation disturbance	Traffic restriction to areas Vegetation clearing control Rehabilitation	Commencement of activity Vegetation clearing control Rehabilitation	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Regular inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours Silencer systems on vehicles	Commencement of activity Integrated into activity Decommissioning of activity	-
	Air quality degradation	Dampening of exposed area	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Rehabilitation Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Specified dump height	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes

	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Loading and hauling	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Vehicle maintenance	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Restriction to roads Continuous rehabilitation	Integrated into activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Restriction to mine roads Continuous rehabilitation	Integrated into activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-

	Invader plants	Regular removal Continuous inspections Report to environmental officer	Integrated into activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	Noise level control Waste management	Integrated into activity	Manage and control vehicle noise and minimize littering.
	Water quality loss (storm water)	-	-	-
	Noise disturbance	Operations during office hours Silencer system on vehicles	Commencement of activity Integrated into activity Decommissioning of activity	-
	Air quality degradation	Speed restriction	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	-	-	-
	Sensitive landscape	-	-	-
	Visual impact	Speed restrictions Minimal traffic possible	Integrated into activity Decommissioning of activity	Minimizing dust and/or loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.

Office block	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	Waste management	Integrated into activity Decommissioning of activity	-
	Water quality loss (waste water)	-	-	-
	Noise disturbance	Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	-

	Air quality degradation	Dampening of exposed areas Speed restriction	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the office area may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Plant site	Vegetation loss	Vegetation clearing control	Commencement of activity	Only the necessary area should be cleared to avoid extensive vegetation loss
	Geological loss	-	-	-
	Topographic change	-	-	-

	Soil pollution	Machine maintenance Immediate rehabilitation Regular inspection Chemical handling control	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommisioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activty	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	Noise level control Waste management	Commencement of activity Integrated into activity	-
	Water quality loss (storm water)	Storm water control Soil pollution control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	Dampening of exposed areas	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance

	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Mineral processing	Vegetation loss	-	-	-
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Vehicle maintenance Immediate rehabilitation Regular inspections Chemical control handling	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off

	Grazing loss	Restriction to cleared areas Rehabilitation	Integrated into activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Restriction to cleared areas Rehabilitation	Integrated into activity	Avoiding, minimizing and/or rectifying the loss of vegetation. Where vegetation growth is hindered greater probability of erosion exists.
	Depressed water table	Reticulated water use Process water management	Integrated into activity	All process- and 'dirty' runoff water need to be recycled for processing by using effective process water management systems.
	Invader plants	Regular removal Continuous inspections Report to environmental officer	Integrated into activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area.
	Fauna	Noise level control Waste management	Integrated into activity	
	Water quality loss (waste water)	-	-	-
	Noise disturbance	Operations during office hours Silencer systems on vehicles	Integrated into activity	-
	Air quality degradation	Dampening of exposed areas Speed restriction Spraying systems on conveyor	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible.
	Archaeological items	-	-	-
	Sensitive landscape	-	-	-
	Visual impact	Dust control	Integrated into activity	Complying with the rehabilitation standards in remedying the effect of the activity can prevent excessive dust degrading the scenery of the area.

	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by human excretions (sewerage) and related wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Ablution	Vegetation loss	Vegetation clearing control	Commencement of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Facility maintenance Immediate rehabilitation Regular inspection	Integrated into activity Decommissioning of activity	Avoiding, minimizing and remedying of spillage preventing any health effect that spillage may have on the environment
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment

	Depressed water table	-	-	-
	Invader plants	-	-	-
	Fauna	Waste management	Integrated into activity	Waste management standards as well as sewerage management to avoid the risk it poses in regard to environmental health
	Water quality (waste water)	Waste water management Regular septic tank draining	Integrated into activity Decommissioning of activity	Waste managing standards as well all sewerage must be treated at a registered facility as well as avoiding the risk it poses in regard to environmental health
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	-
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoid the pollution, degradation and/or destruction of any significant sensitive landscapes
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Complying with the rehabilitation standards in remedying the effect of the activity can prevent erosion channels forming degrading the scenery of the area.
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by human excretions (sewerage) and related wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Vehicle parking lot	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Regular inspections Immediate rehabilitation Drip-tray installation Vehicle maintenance	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Restriction to cleared areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to environment	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area

	Fauna	Waste management	Integrated into activity	Waste management standards as well as sewerage management to avoid the risk it poses in regard to environmental health
	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Silencer systems on vehicles	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dampening of cleared areas	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Wash bay	Vegetation loss	Vegetation clearing control	Commencement of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area

	Fauna	Operations within office hours Waste management	Integrated into activity Decommissioning of activity	Waste management standards as well as sewerage management to avoid the risk it poses in regard to environmental health
	Water quality loss (wastewater)	Wastewater management Draining/cleaning wastewater	Integrated into activity Decommissioning of activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dampening of exposed area	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Waste/metal management	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Parts storeroom	Vegetation loss	Vegetation clearing control	Commencement of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-

	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	Dampening of exposed area	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Waste/metal management	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
Temporary workshop facility	Vegetation loss	Vegetation clearing control	Commencement of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Adhere to mitigation measures	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	Operations within office hours Waste management	Integrated into activity Decommissioning of activity	Waste management standards as well as sewerage management to avoid the risk it poses in regard to environmental health

	Water quality loss (wastewater)	Wastewater management Draining/cleaning wastewater	Integrated into activity Decommissioning of activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dampening of exposed area	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation Waste/metal management	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
Storage facility	Vegetation loss	Vegetation clearing control	Commencement of activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Regular inspections Adhere to mitigation measures Bunker-bay installation Chemical handling protocol	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-

	Invader plants	Regular removal Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	Dampening of cleared areas	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Diesel storage	Vegetation loss	Vegetation clearing control Restriction to roads	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Regular inspections Immediate rehabilitation Bunker-bay installation Adhere to mitigation measures	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-

	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	-
	Air quality degradation	Dampening of mine roads	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.

Domestic waste facility	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Immediate rehabilitation Continuous inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation Restriction to cleared areas	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to environmental officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	Adhere to mitigation measures Immediate clean-up Fencing of site	Commencement of activity Integrated into activity	Avoiding and/or minimizing of littering will help to prevent animal suffering and even loss of life
	Water quality loss (storm water)	Storm water control	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-

	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Waste management Litter pollution management Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Power lines	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	-	-	-

	Grazing loss	Restriction to roads	Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-
	Water quality loss (storm water)	-	-	-
	Noise disturbance	-	-	-
	Air quality degradation	-	-	-
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	-	-	-
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Security points	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-
	Soil pollution	Regular inspections Immediate rehabilitation Littering control	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Traffic restriction to areas Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-

	Water quality loss (storm water)	Storm water control Soil pollution management	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	Operations during office hours	Commencement of activity Integrated into activity Decommissioning of activity	Minimizing the effect the noise created by the operations have on the residing farm owner, animals and surrounding environment
	Air quality degradation	Dampening of exposed areas	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Adhere to mitigation measures Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas

	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Storm water control	Vegetation loss	Vegetation clearing control	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	Rehabilitation	Integrated into activity Decommissioning of activity	Minimizing the impact in trying to rectify and/or re-create the topography of the area.
	Soil pollution	-	-	-
	Grazing loss	Rehabilitation	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Rehabilitation	Integrated into activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-
	Water quality loss (storm water)	-	-	-
	Noise disturbance	-	-	-
	Air quality loss	-	-	-

	Archaeological items	Avoid sites of significance	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance
	Sensitive landscape	Avoid significant sensitive sites	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	-	-	-
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.
Access and Hauling roads	Vegetation loss	Vegetation clearing control Minimum roads possible	Commencement of activity Integrated into activity	Preventing the extensive loss of vegetation thereby keeping the footprint to a minimum
	Geological loss	-	-	-
	Topographic change	-	-	-

	Soil pollution	Immediate rehabilitation Regular inspections	Integrated into activity Decommissioning of activity	Avoiding soil pollution as far as possible in order to prevent sterilization of the ground, vegetation loss and the possible impact on the animals and ground/surface waterbodies in the event of a storm water run-off
	Grazing loss	Rehabilitation Vegetation clearing control Restriction to roads	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and rectifying the loss of vegetation used for livestock grazing and nesting grounds
	Vegetation disturbance	Traffic restriction to roads Rehabilitation Vegetation clearing control	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding and/or minimizing the disturbance and loss of vegetation minimizing the effect on the overall environment
	Depressed water table	-	-	-
	Invader plants	Regular removal Continuous inspections Report to rehabilitation officer	Integrated into activity Decommissioning of activity Closure of activity	Managing and preventing the establishment of invader species endangering the fragile indigenous species of the area
	Fauna	-	-	-
	Water quality loss (storm water)	Storm water control Erosion control Soil pollution management	Commencement of activity Integrated into activity	Avoid run-off storm water contamination as well as excessive erosion during such an event.
	Noise disturbance	-	-	-
	Air quality degradation	Dampening of mine roads	Integrated into activity	Minimizing the amount of dust released into the air preserving air quality as far as possible
	Archaeological items	Restriction to roads Avoid significant sites	Commencement of activity Integrated into activity	Avoiding the destruction of any structure of archaeological and/or cultural significance

	Sensitive landscape	Avoid significant sensitive sites Adhere to mitigation measures	Commencement of activity Integrated into activity	Avoiding and/or minimizing the effect and degradation the operations may have on any significant sensitive areas.
	Visual impact	Rehabilitation	Integrated into activity Decommissioning of activity	Avoiding, minimizing and/or rectifying the loss of vegetation
	Waste disposal	Management standards	Commencement of activity Integrated into activity Decommissioning of activity	Avoiding the degradation of the environment as well as the health of any individual, animal, plant and/or soil by scattered metals and other wastes
	Re-vegetation	Regular inspections	Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas
	Area rehabilitation	Closure standards	Integrated into activity Decommissioning of activity Closure of activity	Complying with the rehabilitation standards and closure objectives by monitoring vegetation re-growth of the disturbed areas, removing invader species and ensuring the state of environment is as close as possible to the pre-prospected area.

i) Financial provision

(1) Determination of the amount of Financial Provision.

(a) Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under Regulation 22(2)(d) as described in 2.4 herein.

The sole determined objective is to rehabilitate the area during and after prospecting activities to such an extent that the post-prospected environment is almost in the same condition as the original undisturbed environment. This can be achieved through the following:

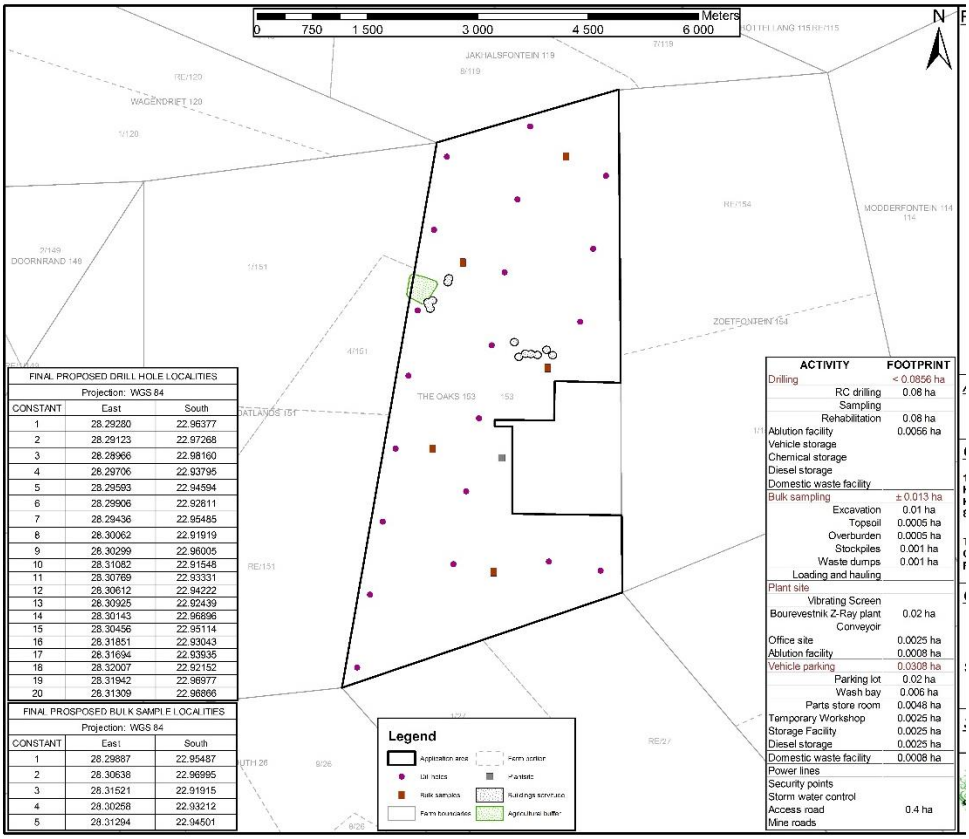
- To prevent the sterilization of any ore reserves
- To prevent the establishment of any permanent structures or features
- To manage and limit any impact to the surface and groundwater aquifers in such a way that an acceptable water quality and yield can still be obtained, when a closure certificate is issued.
- To establish a stable and self-sustainable vegetation cover
- To limit and rehabilitate any erosion features and prevent any permanent impact to the soil capability of the mine
- To limit and manage the visual impact of the mine
- To safeguard the safety and health of humans and animals on the mine

When rehabilitation proves successful the vegetation re-growth must be of such quality that this area can be used as a grazing field for farm livestock (as it currently the case).

(b) Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

The environmental objectives in relation to the closure has not been consulted with the landowner and will be done during the of the Environmental Impact Assessment / Environmental Management Programme consultation. The land after mining will most probably be the continuation of natural grazing land for livestock farming activities.

(c) Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main mining activities, including the anticipated mining area at the time of closure.



FINAL PROPOSED DRILL HOLE LOCALITIES
Projection: WGS 84

CONSTANT	East	South
1	28.29280	22.96377
2	28.29123	22.97268
3	28.28966	22.98160
4	28.29706	22.93795
5	28.29593	22.94594
6	28.29906	22.92811
7	28.29436	22.95485
8	28.30062	22.91919
9	28.30299	22.96005
10	28.31082	22.91548
11	28.30769	22.93331
12	28.30612	22.94222
13	28.30925	22.92439
14	28.30143	22.96896
15	28.30456	22.95114
16	28.31851	22.93043
17	28.31694	22.93935
18	28.32007	22.92152
19	28.31942	22.96877
20	28.31309	22.96866

FINAL PROSPOSED BULK SAMPLE LOCALITIES
Projection: WGS 84

CONSTANT	East	South
1	28.29887	22.95487
2	28.30638	22.96995
3	28.31521	22.91915
4	28.30258	22.93212
5	28.31294	22.94501

ACTIVITY	FOOTPRINT
Drilling	< 0.0856 ha
RC drilling	0.08 ha
Sampling	
Rehabilitation	0.08 ha
Ablution facility	0.0056 ha
Vehicle storage	
Chemical storage	
Diesel storage	
Domestic waste facility	
Bulk sampling	± 0.013 ha
Excavation	0.01 ha
Topsoil	0.0005 ha
Overburden	0.0005 ha
Stockpiles	0.001 ha
Waste dumps	0.001 ha
Loading and hauling	
Plant site	
Vibrating Screen	
Bourevestnik Z-Ray plant	0.02 ha
Conveyoir	
Office site	0.0025 ha
Ablution facility	0.0008 ha
Vehicle parking	0.0308 ha
Parking lot	0.02 ha
Wash bay	0.006 ha
Parts store room	0.0048 ha
Temporary Workshop	0.0025 ha
Storage Facility	0.0025 ha
Diesel storage	0.0025 ha
Domestic waste facility	0.0008 ha
Power lines	
Security points	
Storm water control	
Access road	0.4 ha
Mine roads	

- Drill hole rehabilitation is planned to occur in the following manner:
  - All drill holes will be rehabilitated before commencing to the following hole posistion
  - Under normal circumstances will be drill chips extracted by backfilled in a reverse sequence as being drilled out. Should a groundwater body be encountered/intersected or the need arises for the core drilling of a hole it will be rehabilited through the casing and sealing of the hole with the clear marking thereof. Casing of a hole will entail that ground is excavated with a dimension of 1 x 1 x 1 m. With the casing of the hole will a cement slap of 1 x 1 x 0.5 m be constructed and covered with the excavated soil.
  - The rehabilitated area will be continuously inspected against invader plant species and to monitor the indigenous vegetation regrowth.

- Bulk sample rehabilitation is planned to occur in the following manner:
  - The rough material from the screens will be discarded back into the open excavation to initiate the rehabilitation process.
  - The surplus form the sorting plant is then discarded into the excavation

- Once filled the overburden and topsoil is respectively spread over the area to finalizer rehabilitation
- The rehabilitated area will be continuously inspected against invader plant species and to monitor the indigenous vegetation regrowth rate.

Rehabilitation of excavation areas:

- The excavated area must serve as a final depositing area for the placement of tailings during processing
- Rocks and coarse material removed from the excavation must be dumped into the excavation simultaneously with the tailings
- Once excavations have been refilled with overburden, rocks and coarse natural materials and profiled with acceptable contours and erosion control measures, the topsoil previously stored, shall be returned to its original depth over the area
- The area shall be fertilized if necessary to allow vegetation to establish rapidly. The site shall be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora.
- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the mining be corrected and the area be seeded with a vegetation seed mix to his or her specification.

Overburden and spoils

- Overburden and spoils should be used as backfill material in areas that had been prospected and that are still showing depressions or island around trees.

- During decommissioning of the project the following will be done to ensure successful closure
  - All infrastructure will be removed from the area and the compacted ground ripped and rehabilitated
  - All roads will also be ripped and rehabilitated
  - All rehabilitated areas will be monitored and regularly inspected against invader species as well as monitoring the indigenous vegetation regrowth rate.

Access and hauling roads:

- Whenever a Right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the Right, any access road or portions thereof, constructed by the holder and which will no longer be required by the landowner/tenant, shall be removed and/or rehabilitated to the satisfaction of the Regional Manager.

- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre-prospected situation
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilized to ensure the re-growth of vegetation. Imported road construction materials which may hamper regrowth of vegetation must be removed and disposed of in an approved manner prior to rehabilitation
- If reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analyzed and any deleterious effects on the soil arising from the operations, be corrected and the area be seeded with a seed mix to the Regional Manager's specification

Buildings and structures:

- Concrete structures need to be demolished to a depth of between 300 mm to 1 m below ground level, depending on the thickness of the foundations; unless it will be used for future purposes
- All rubble can be used to backfill any voids on site, but any scrap material like iron or steel reinforcement need to be disposed of at a registered facility
- The topography should then be restored to its natural contours, and any compacted area should be ripped to a depth no deeper than 300 mm

(d) Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.

Throughout the whole document during the impact assessment and environmental management all possible management, remediation and mitigation measures were planned towards the rehabilitation of the environment to result in an outcome compatible with the closure objectives.

(e) Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with the applicable guideline.

The calculated total amount necessary for the financial provision to manage and rehabilitate the environment is **R 352 198.83**

CALCULATION OF THE QUANTUM

Applicant: MAKESHIFT 1182 (PTY) LTD — Location: THE OAKS 153 MR — Date: Sep 19

No.	Description	Unit	A Quantity	B Master Rate	C Multiplication factor	D Weighting factor 1	E=A*B*C*D Amount (Rands)
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	200	R 16.40	1	1	R 3 280.00
2 (A)	Demolition of steel buildings and structures	m2	25	R 228.40	1	1	R 5 710.00
2(B)	Demolition of reinforced concrete buildings and structures	m2	85	R 336.59	1	1	R 28 610.15
3	Rehabilitation of access roads	m2	4 000	R 40.87	1	1	R 163 480.00
4 (A)	Demolition and rehabilitation of electrified railway lines	m		R 396.70	1	1	R -
4 (A)	Demolition and rehabilitation of non-electrified railway lines	m		R 216.38	1	1	R -
5	Demolition of housing and/or administration facilities	m2	33	R 456.80	1	1	R 15 074.40
6	Opencast rehabilitation including final voids and ramps	ha	0.09	R 232 488.77	1	1	R 20 923.99
7	Sealing of shafts adits and inclines	m3		R 122.62	1	1	R -
8 (A)	Rehabilitation of overburden and spoils	ha	0.003	R 159 640.69	1	1	R 478.92
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha		R 198 829.59	1	1	R -
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha		R 577 495.38	1	1	R -
9	Rehabilitation of subsided areas	ha	0.0337	R 133 675.03	1	1	R 4 504.85
10	General surface rehabilitation	ha		R 126 462.35	1	1	R -
11	River diversions	ha		R 126 462.35	1	1	R -
12	Fencing	m	12	R 144.25	1	1	R 1 731.00
13	Water management	ha		R 48 084.54	1	1	R -
14	2 to 3 years of maintenance and aftercare	ha	0.561	R 16 829.59	1	1	R 9 441.40
15 (A)	Specialist study	Sum				1	R -
15 (B)	Specialist study	Sum				1	R -
					Sub Total 1		R 253 234.71

1	Preliminary and General	R 30 388.17	weighting factor 2 1	R	30 388.17
2	Contingencies	R	25 323.47	R	25 323.47
			Subtotal 2	R	308 946.35
			VAT (15%)	R	43 252.49
			Grand Total	**R**	**352 198.83**

Mechanisms for monitoring compliance with and performance assessment against the environmental management programme and reporting thereon, including

(f) Monitoring of impact Management Actions
(g) Monitoring and reporting frequency
(h) Responsible persons
(i) Time period for implementing impact management actions
(j) Mechanism for monitoring compliance

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES (FOR THE EXECUTION OF THE MONITORING PROGRAMMES)	MONITORING AND REPORTING FREQUENCY and TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS.
Geological investigations	Vegetation loss	Extent of vegetation loss	Environmental Manager	Continuous
		Vegetation re-establishment rate	-	-
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring waste management	Environmental Manager	Continuous
INITIAL DRILLING				
Drilling	Vegetation loss	Extent of vegetation loss	Environmental Manager	Continuous
		Vegetation re-establishment rate	Environmental Manager	Monthly
		Presence of invader species	Environmental Manager	Monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	Monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	Monthly
	Waste management	Monitoring of waste management	Environmental manager	Continuous
Ablution	Vegetation loss	Extent of vegetation loss	Environmental Manager	Continuous
		Vegetation re-establishment rate	Environmental Manager	Monthly
		Presence of invader species	Environmental Manager	Monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-

	Waste management	Monitoring waste management	Environmental manager	Continuous
Vehicle parking	Vegetation loss	Extent of vegetation loss	Environmental Manager	Continuous
		Vegetation re-establishment rate	Environmental Manager	Monthly
		Presence of invader species	Environmental Manager	Monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	Monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	Monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Chemical storage	Vegetation loss	Extent of vegetation loss	-	-
		Vegetation re-establishment rate	-	-
		Presence of invader species	-	-
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Diesel storage	Vegetation loss	Extent of vegetation loss	-	-
		Vegetation re-establishment rate	Environmental Manager	Monthly
		Presence of invader species	Environmental Manager	Monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Domestic waste	Vegetation loss	Extent of vegetation loss	-	-
		Vegetation re-establishment rate	-	-
		Presence of invader species	Environmental Manager	Monthly
	Soil pollution	Visible littering	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
BULK SAMPLING				
Bulk sample excavation	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous

	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Topsoil	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	-	-
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Overburden	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	-	-
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Stockpiles	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	-	-
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Waste dumps	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	-	-
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous

Loading and hauling	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Plant site	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	6 monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Mineral processing	Vegetation loss	Extent of vegetation loss	-	-
		Vegetation re-establishment rate	-	-
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Office block	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Ablution	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-

	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Vehicle parking lot	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Wash bay	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Parts storeroom	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Yearly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Temporary Workshop facility	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Storage facility	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly

	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Diesel storage	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Domestic waste facility	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	6 monthly
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Power lines	Vegetation loss	Extent of vegetation loss	Environmental Manager	Yearly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	-	-
	Soil pollution	Visible spills on ground	-	-
	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Security points	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Storm water control	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	-	-
	Soil pollution	Visible spills on ground	-	-

	Noise disturbance	Monitoring of noise levels	-	-
	Air quality loss	Monitoring of dust fall	-	-
	Waste management	Monitoring of waste management	Environmental Manager	Continuous
Access and Hauling roads	Vegetation loss	Extent of vegetation loss	Environmental Manager	6 monthly
		Vegetation re-establishment rate	Environmental Manager	Yearly
		Presence of invader species	Environmental Manager	Continuous
	Soil pollution	Visible spills on ground	Environmental Manager	Continuous
	Noise disturbance	Monitoring of noise levels	Noise monitoring specialist	6 monthly
	Air quality loss	Monitoring of dust fall	Air monitoring specialist	6 monthly
	Waste management	Monitoring of waste management	Environmental Manager	Continuous

l) Indicate the frequency of the submission of the performance assessment report.

The submission of the Performance Assessment / Environmental Audit Reports will be done on an annual basis as well as on the decommissioning and closure of the project as legislatively required.

m) Environmental Awareness Plan

(1) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.

Initial employee training will be done on employment of personnel, handling all issues related to General and Conservational Environmental Awareness. Follow up training workshops will be held on an annual basis and when expansion and/or implementation of new equipment are introduced to the mine.

Motivation:

- Inspections will be held on a regular basis against the do's and don'ts listed within this document. Immediate penalties can be given to offenders.
- On the discretion of the mine, motivation can be implemented
- By all-expenses paid, braai/function at the end of unbroken fixed environmental contamination hours.

(2) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

- Everyday Awareness
  - Littering – As wild species still roam the area from time to time, the accidental ingestion of litter is a possibility and highly dangerous as it can and will kill the animal involved. Even when not ingested smaller mammals are always at risk in getting tangled with plastics, rubber etc., this can ensure numerous suffering and eventually death of the animal.

    Plastics, rubber, some types of paper and glass are not biodegradable and release poisons into the environment when exposed to harsh weather conditions. Even when buried, they tend to resist weathering. These poisons released into the environment can be harmful to our plant species, but even if it is not harmful to the plant itself the plant tend to store all absorbed substances in their fruit, roots and root tuber and the last mentioned may be utilized by humans or animals leading to the consumption for harmful chemicals that may pose illness or even death.

    No glass, paper, plastics and cigarette duds are to be littered during the duration of the prospecting operations. Garbage containers will be installed and maintained to prevent litter pollution.

  - Open fires – It is by law prohibited to start open fires. However, due to the hot and dry conditions of the region is it very susceptible for runaway fires. No open fires will be tolerated during the prospecting period and as this is regarded by law as a criminal offence related penalties can be issued. The littering of self-ignitable substances or objects (e.g. matches) are also not allowed as it will always pose a danger regarding field fires, and if such happen the person responsible to the littering will be charged with arson and related penalties can be issued.

- Sanitation and Personal Hygiene

  Sanitation and personal hygiene is a very important subject for environmental and social health. Improper sanitation habits can lead to intestinal parasite infestations within humans and animals, endangering the overall health of the recipients. Unfortunately these infestations do not stay only within the host and will spread rapidly throughout a community or herd.

  Human viruses like Tubercle bacillus (TB) and Herpes simplex, both are very contagious, spread vigorously throughout a community not handling good hygiene habits/practices.

  - ✓ Strict use and cleanliness of the toilette facilities will be enforced during the entire life of project.

  - ✓ Employees will further be advised and educated on the importance of consuming clean and fresh water. Several sites will be identified and water tanks will be erected for safe human water consumption.

- Fauna – Wild animals roaming within the area is a common sight from time to time, but reptiles and smaller rodents permanently inhabit the area. Wild animals are and will always be very dangerous.

  Contractors and employees will be advised to stay clear from any wild animal or reptile and not to try and provoke them in any manner. They will further be educated on dangerous and poisonous reptiles and the actions to be taken when such reptiles are encountered.

- Flora

  The vegetation of the Limpopo regions is very fragile and easily endangered by alien species invading the province at an alarming rate and due to the slow growth rate of our indigenous species.

  - ✓ No indigenous shrubs of trees will be unnecessarily uprooted and utilized for firewood, the employees will rather be advised to utilize invader species and be educated on which plant species are indigenous, endangered or alien.

  - ✓ If any invader species are observed the reporting thereof to the rehabilitation site manager will be highly recommended.

  - ✓ Penalties will be given to individuals that damage any endangered species e.g. cutting branches/bark from a Camel/Grey Camel tree.

- Work Related Awareness
  - Work shops

    All workshop personnel will receive a basic information session regarding the threats of diesel, oil and other related chemicals impose on the environment.

    The following must be implemented or enforced:-
    - ✓ Before cleaning the workshop, make sure all spillages have been treated.
    - ✓ When handling related chemicals make sure of non-spillage procedures.
    - ✓ Make sure boots are cleaned from chemicals before leaving the workshop into the unprotected environment.
    - ✓ Vehicles must be in the workshop before removal of drip pans.
    - ✓ When working on equipment outside the workshop, the appropriate measures needs to be implemented to prevent chemical spillage.
    - ✓ Related waste/scrap must be dispose of in the appropriate manner.
  - Wash bay

    Although washing of vehicles do not pose a risk to the environment several pointers need to be adhered to:-
    - ✓ Be sure that the electrical wires of the washing equipment do not make any contact with water used.
    - ✓ Plastic and domestic wastes removed from the vehicles from the vehicles need to be discarded in the appropriate manner
    - ✓ If any oil or diesel leakage is observed, immediate communication with the workshop and repair of vehicle needs to be done, before it is cleaned or can be cleaned in the workshop.
    - ✓ Make sure boots are cleaned from chemicals before leaving the bay into the unprotected environment
    - ✓ When a detergent is used it must be ensured that it is bio-degradable and allocated for this purpose.

- Heavy vehicle operators
  All heavy vehicles pose a threat to the environment in several ways. Some awareness must be initiated by the operators to minimize the treat to the environment.

  The following must be implemented or enforced:-
  - ✓ Daily checking for oil/diesel leakages before vehicle is operated
  - ✓ Drip pans must be installed during “off-time”
  - ✓ Immediate communication with the workshop when faults are observed.
  - ✓ Strict adherence to the mine roads and no off-road driving to prevent trampling of vegetation
  - ✓ Driving speed must be complied with. Beware of animals, workers and other vehicles.

- Machinery operators
  Although the operational equipment does not pose any environmental risk, employees still need to adhere to some measurements to prevent spillage.

- Maintenance personnel
  All maintenance personnel must receive basic training on work related environmental awareness to minimize/eliminate the possibility of environmental degradation.

  Pointers that will be looked at:-
  - ✓ Electricians may not leave any cables unprotected scattered on the site – animals may get tangled up.
  - ✓ During fencing/rehabilitation common fence wires may not be left scattered as these rust over time – any cuts to animals and humans (sepsis and tetanus risk) can lead to suffering or great discomfort.
  - ✓ No metals may be left scattered as it pose the same threat as described directly above
  - ✓ All personnel handling chemical relating products must follow handling procedures – any spillage contaminating the ground will pose risk to environmental degradation
  - ✓ All chemical used must be put to storage afterwards – containers may leak and environmental contamination occurs.

n) Specific information required by the Competent Authority
(Among others, Confirm that the financial provision will be reviewed annually)

- Annually renewal of Financial Provision
- Annual Monitoring and Compliance Report
- Annual Progress Report

2) **UNDERTAKING**

The EAP herewith confirms

a) The correctness of the information provided in the reports
b) The inclusion of comments and inputs from stakeholders and I&Aps;
c) The inclusion of inputs and recommendations from the specialist reports where relevant; and
d) The acceptability of the project in relation to the findings of the assessment and level of mitigation proposed.

Signature of the Environmental Assessment Practitioner
Name of Company: **LW Consultants (Pty) Ltd**
Date: **3 October 2019**

-END-