

Department: Mineral Resources REPUBLIC OF SOUTH AFRICA

Private Bag X 9467, Polokwane, 0700, Tel: 015 287 4700, Fax: 015 297 7230 DMR Building, 101 Dorp Street, Polokwane, 0699

Enquiries: Ms. M.M. Sathekge Ref: LP 30/5/1/2/3/2/1 (10104) EM

E-Mail Address: Mapula.Sathekge@dmr.gov.za Sub-Directorate: Mine Environmental Management

BY HAND

The Director(s) BCR Minerals (Pty) Ltd Postnet Suite 911 BRYANSTON 2021

DEPARTMENT OF MINERAL RESOURCE MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

2016-10-24

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER: LIMPOPO REGION

Attention: Mr. Walter Murray

Fax no: 086 671 0418

ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 of 1998) AS AMENDED (NEMA) AND THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 FOR A MINING RIGHT OF CHROME ON PORTIONS 8 AND 22 OF THE FARM KENNEDY'S VALE 361 KT AND PORTIONS 24, 25, 26 AND 28 OF THE FARM SPITSKOP 333 KT, SITUATED IN THE MAGISTERIAL DISTRICT OF GREATER TUBATSE: LIMPOPO REGION.

With reference to the abovementioned application, please be advised that the Department has decided to grant an environmental authorisation in terms of Section 24 of NEMA (Act 107 of 1998). The environmental authorisation and reasons for the decision are attached herewith

In terms of regulation 4 (2) of the Environmental Impact Assessment Regulations of 2014, you are instructed to notify all registered interested and affected parties, in writing within 14 (Fourteen) calendar days, from the date of the Department's decision in respect of your application and the relevant provisions regarding the lodgement of appeal must be provided for in terms of the National Appeal Regulations of 2014.

Should you wish to appeal any aspect of the decision, you must submit the appeal to the Minister of Environmental Affairs and a copy of such appeal to the Department of Mineral Resources (Limpopo Regional Office), within 20 days from the date of notification, and such appeal must be lodged as prescribed in by Chapter 2 of the National Appeal Regulations of 2014, by means of the methods as per prescribed below:

Appeal to the Department of Environmental Affairs

Attention

: Directorate Appeals and Legal Review

Email

: appealsdirectorate@environment.gov.za : Private Bag X 447, **PRETORIA**, 0001

By post By hand

: Environmental House, Corner Steve Biko and Soutpansberg Street, Arcadia, Pretoria,

0083/

Copy of the lødged appeal to the Department of Mineral Resources

Attention

Regional Manager: Limpopo Region

By facsimile

: (0,75) 297 7230

E-mail

tebogo.mangaba@dmr.gov.za

By post

7: Private Bag X 9467, POLOKWANE, 0700

By hand

.f. DMR/Building, 101 Dorp Street, Polokwane, 0699

Should you decide to appeal, you must comply with the National Appeal Regulation of 2014 in relation to notification of all registered interested and affected, and a copy of the official appeal form can be obtained from the Department of Environmental Affairs.

Kind Regards

REGIONAL MANAGER: MINERAL REGULATION

LIMPOPO REGIONAL OFFICE,

DAVE 24 October 2016

DEPARTMENT OF MINERAL MANAGEMIL IT
MINE ENVIRONMENTAL MANAGEMIL IT
PRIVATE BAG X 9457 : POLOKWANE : 0700
TEL 015 287 4700

2016-10-24

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998). AS AMENDED REGIONAL MANAGERS AND THE ORIGINAL MANAGERS AND THE ORIGINAL MANAGERS.



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

2016 - 10 - 2 4

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED

REGIONAL MANAGER : LIMPOPO REGION

Private Bag X 9467, Polokwane, 0700, Tel: 015 287 4700, Fax: 015 297 7230 DMR Building, 101 Dorp Street, Polokwane, 0699

ENVIRONMENTAL AUTHORISATION

Reference number:

LP30/5/1/2/3/2/1 (10104) EM

Last amended:

First issue

Holder of authorisation:

BCR Minerals (Pty) Ltd

Location of activities:

Portions 8 and 22 of the farm Kennedy's Vale 361 KT and portions 24, 25, 26 and 28 of the farm

Spitskop 333 KT

DECISION

ACRONYMS

NEMA:

The National Environmental Management Act, 1998 (Act 107 of 1998), as

amended

DEPARTMENT:

Department of Mineral Resources.

EA:

Environmental Authorisation.

IEA:

Integrated Environmental Authorisation Environmental Management Programme

EMPr: BAR:

Basic Assessment Report

S&EIR:

Scoping and Environmental Impact Report

I&AP:

Interested and Affected Parties

ECO:

Environmental Control Officer Limpopo Heritage Resource Agency

LIHRA: SAHRA:

South African Heritage Resources Agency

EIA REGULATIONS:

EIA Regulations, 2014

MPRDA:

LIA riegulations, 2014

Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002),

NEMA:WA:

National Environmental Management: Waste Act, 2008 (Act 59 of 2008),

as amended

as amended

EIA:

Environmental Impact Assessment.

The Department is satisfied, on the basis of information availed to it and subject to compliance with the conditions of this integrated environmental authorisation, that the applicant should be authorised to undertake **NEMA EIA** listed activity (ies) specified below. Details regarding the basis on which the Department reached this granting decision are set out in Annexure "I" of this environmental authorisation.

ACTIVITY APPLIED FOR

By virtue of the powers conferred on it by NEMA, the Department hereby grant an application for EA by BCR Minerals (Pty) Ltd with the following contact details –

Postnet Suite 911 BRYANSTON 2021

Tel no: (011) 467 5793

Fax no: 086 236 7206

DEPARTMENT OF MINERAL RESOURCES

MINE ENVIRONMENTAL MANAGEMENT
PRIVATE BAG X 9467: POLOKWANE: 0760
TEL: 015 287 4700

2016 -10 - 2 4

ENVIRONMENTAL AUTHORISATION: GRANTED NEMA, 1998 (ACT 107 05 1998), AS AMENDED

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to undertake the following activities listed in the NEMA EIA Regulation, 2014.

NEMA: LISTED ACTIVITIES:

Listed in the EIA Regulations R. 984 of 2014 as:-

Activity 17 — "Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to the extraction 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 28 of 2002).

The proposed mining project will cover an area of approximately 355ha. Some infrastructure has already been erected on site as authorized during the bulk sampling phase. The existing infrastructure consists of:

- Three stockpile areas
- A laydown area that includes offices, workshop, a hazardous substances storage facility and ablution facilities
- Access roads

The associated activities of the proposed opencast Chrome ore mining operation will entail the following:

Construction phase

- Establishment of additional associated infrastructure such as access roads, offices, workshops, etc.
- Site clearing (topsoil stripping) for additional laydown areas;
- Construction of Pollution Control Dams (PCDs);
- Construction of stormwater management features;
- Construction of river crossings;
- Establishment of ablutions & change facilities with sewage treatment plant; and

Construction of water storage facilities

Operational Phase

- Excavation and ground work following a simple roll over method ie. stripping of topsoil followed by subsoil and preparation of extraction the MG 4 to 1 Package Chromite seams;
- Drilling and blasting using a single benching method
- Stockpiling of residue material
- Continuous backfilling of residue material in voids created by mining operation
- Continuous rehabilitation of backfilled areas.
- Processing of ore through screening
- Stockpiling of ore and
- Bulk road transport of processed ore

Decommissioning Phase

- Demolition/ removal of portable and related infrastructure
- Rehabilitation of the lay down areas
- Demolition of PCDs and
- Demolition of workshops, waste storage facilities and fuel storage facilities

MINE ENVIRONMENTAL MANAGENE VIPE PRIVATE BAG X 9467 : POLOKWANE : 0700 TEL: 015 287 4700

2016 -10 - 2 4

ENVIRONMENTAL AUTHORISATION : GRANTED NEMA , 1998 (ACT 107 OF 1998) , AS AMENDED REGIONAL MANAGER LIPE PRIOR PERSON

An opencast mining method employing a conventional truck and shovel operation is planned. The proposed project will consist of crushing and screening to produce the various saleable products and no beneficiation will take place on site.

The granting of this EA is subject to the conditions set out below (site specific) and in **Annexure 2** (Departmental standard conditions). The Environmental Management Programme (EMPr) attached as part of reports for the above development submitted as part of the application for an EA is hereby approved and must be adhered to throughout the life cycle of the operation.

EA SITE SPECIFIC CONDITIONS

- The Chamaeleo dilepis subsp dilepis (Common Flap-neck Chameleon) is protected by the Limpopo Environmental Management Act, 2003 (Act 7 of 2003), hence, they must not be removed (disturbed or destroyed, collected, removed, transported, exported, donated, purchased or sold) unless the necessary permission is granted by the Limpopo Department of Economic Development, Environment and Tourism (LEDET).
- 2. Heritage sites (Archaeological sites and Graves) should not be disturbed without prior authorisation from LIHRA/ SAHRA
- All development footprint areas and areas affected by the proposed development must remain as small as possible and must not encroach onto the surrounding sensitive areas and the associated buffer zones
- 4. Water Use License (WUL) must be obtained from the Department of Water and Sanitation (DWS) prior commencement of activity.

- Wetland and riverine areas are to be considered as no go zones unless authorisation is obtained.
 Ensure that construction activities are outside the demarcated wetland area. No activity should be allowed to encroach on to wetland system.
- 6. The pits must be backfilled with course waste rock as soon as this rock has been worked out. Barriers such as fencing or berms will be required to prevent humans or animals from falling into the pits.
- 7. Rehabilitation of the environment affected by activities undertaken must be implemented as committed on the approved EMPR.

8. Financial provision committed on your letter dated 04 July 2016 must be submitted prior to the execution of the mining right in terms of section 23(1) of the MPRDA (Act 28 of 2002).

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700

ANNEXURE 1: REASONS FOR THE DECISION

TEL: 015 287 4700 2016 -10 - 2 4

1. Background

ENVIRONMENTAL AUTHORISATION : GRANTED

BCR Minerals (Pty) Ltd submitted an application for an EA for activities listed in the EIA Regulations, 2014 as:

Listed in the EIA Regulations R. 984 of 2014 as:-

Activity 17 –"Any activity including the operation of that activity which requires a mining right as contemplated in section 22 of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002), including associated infrastructure, structures and earthworks, directly related to the extraction 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 28 of 2002).

BCR Minerals (Pty) Ltd appointed Environmental Management Assistance (Pty) Ltd to undertake the Scoping and Environmental Impact Assessment process as required by Regulation 24 of the EIA Regulations

2. Information considered in making the decision

In reaching its decision, the Department took, inter alia, the following into consideration -

- a) The information contained in the application form received by the Department on 10 June 2015:
- b) The information contained in the EIAR and EMPR received by the Department on 25 April 2016;
- c) The objectives and requirements of the applicable and relevant legislation, policies and guidelines and the EIA Regulations of 2014;
- d) Public Participation Process (PPP) attached in (Appendix T) of the EIAR and EMPR compiled by Justin Bowers of Ecoleges Environmental Consultants for Taryn Bigwood of Environmental Management Assistance (Pty) Ltd dated April 2016.
- e) Air Quality Impact Assessment report (Appendix E) prepared by Clive Wray of Rayten Engineering Solutions dated 25 February 2016;

- f) Biodiversity Impact Assessment report (Appendix G) prepared by Marianne Strohbach independently for Environmental Management Assistance (Pty) Ltd dated January 2016;
- g) Avifauna survey and Impact Assessment report (Appendix H) prepared by I.J. Whyte for Environmental Management Assistance (Pty) Ltd dated 18 & 19 January 2016;
- h) Bat Survey report (Appendix J) prepared by Dawn Cory Toussaint for Environmental Management Assistance (Pty) Ltd;
- i) Geohydrological Impact Assessment report (Appendix M) prepared by Martin Holland and Theo Rossouw and reviewed by Kai Witthuser for Anandi Alers of Environmental Management Assistance (Pty) Ltd dated January 2016;
- j) Heritage Impact Assessment report (Appendix O) prepared by J.A.Van/Schalkwyk for Anandi Alers of Environmental Management Assistance (Pty) Ltd dated January 2016, TEL 015 287 4700
- k) Noise Impact Assessment report (Appendix F) prepared by Enviro Acoustic Research?
- Soil Impact Assessment report (Appendix K) prepared by Vilioen Associates for Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated February 2016; Anandi Alers of Environmental Management Assistance (Pty) Ltd dated Pty Alexander (Pty) Ltd dated Pty Ale
- m) Human Health Impact Assessment report (Appendix N) prepared by CSIR for Environmental Management Assistance (Pty) Ltd;
- Traffic Impact assessment Report (Appendix P) prepared by Lufuno Ndou & Lesego Mahlo and reviewed by Pieter Pretorius for Anandi Alers of Environmental Management Assistance (Pty) Ltd dated January 2016;
- o) Mine Rehabilitation, Closure and Liability Plan (Appendix S) prepared by Viljoen & Associates for Environmental Management Assistance (Pty) Ltd dated March 2016.

3. Key factors considered in making the decision

All the information presented to the Department was taken into account upon the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance are set out below.

- A sufficient Public Participation Process (PPP) was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014 (R982 of 2014) for public involvement;
- b) The environmental impacts associated with the proposed activity will be addressed by the implementation of proposed mitigation measures outlined in the EIAR and EMPR compiled by Anandi Alers of Environmental Management Assistance (Pty) Ltd.
- c) The findings and recommendations stipulated in the Rehabilitation, Closure and Liability plan (Appendix S) as it is aimed at mitigating the impacts caused by mining activities; Restoring land back to a satisfactory standard, taking the current biodiversity and future proposed land use into consideration and Preventing any future (not currently anticipated) risks to the environment and people by looking at

knowledge gaps that will need to be addressed during operation as part of the rehabilitation, as well as upon closure.

d) A commitment letter dated 04 July 2016 confirming that the financial provision to the amount of R8 699 326.49 (Eight million six hundred and ninety nine thousand three hundred and twenty six rand forty nine cents only) will be made available prior to the issuing of the mining right in terms of section 23(1) of the MPRDA (Act 28 of 2002).

Findings

After consideration of the information and factors listed above, the Department made the following findings –

- The potential impacts on the proposed site were clearly investigated and mitigation measures outlined. a)
- b) Public Participation Process complied with Chapter 6 of the EIA Regulations R.982 of 2014 (Appendix T of the EIAR and EMPR). The PPP included, inter-alia, the following:
 - Proof of consultation with various State Departments and response thereof
 - Registration on a database for Background Information Documents (BID). (Distribution of such through fax, e-mail and post and response thereof);
 - A newspaper advertisement was placed in the local newspaper "Steelburger/ Lydenburg" dated Friday, 11 December 2015: ENVIRONMENTAL AUTHORISAT
 - Notices placed at the project site (Photos attached):

 REGIONAL MARKET
 - Public notices placed (Photos attached);
 - Public meeting held on 28 January 2016 at Tubatse Chrome Club confirmed by minutes of the meeting accompanied by a signed attendance register;

All issues raised by interested and affected parties were adequately addressed and no objection was received to date.

ANNEXURE 2

DEPARTMENTAL STANDARD CONDITIONS

1. SCOPE OF AUTHORISATION

- 1.1. The holder of EA shall be responsible for ensuring compliance with the conditions contained in the EA. This includes any person acting on the holder's behalf, including but not limited to an agent, servant, contractor, subcontractor, employee, consultant or any person rendering a service to the holder of EA.
- 1.2. Any changes to, or deviation from the project description set out in this EA must be approved in writing by this Department before such changes or deviation may be effected. In assessing whether to grant such approval or not, the Department may request such information as is deems necessary to evaluate the significance and impacts of such changes or deviation and it may be necessary for the holder of the EA to apply for further authorisation in terms of the EIA Regulations.
- 1.3. The activities, which are authorised, may only be carried out at the property (ies) indicated in the EA and or on the approved EMPr.

- 1.4 Where any of the holder of the EA contact details change including name of the responsible person, physical or postal address/ or telephonic details, the holder of the EA must notify the Department as soon as the new details become known to the holder of the EA.
- 1.5 The EA does not negate the responsibility of the holder to comply with any other statutory requirements that may be applicable to the undertaking of such activity (ies).
- The holder of EA must ensure that all areas where the authorised activities occur have controlled 1.6 access to ensure safety of people and animals.

2 APPEAL OF AUTHORISATION

2.1 The holder of EA must in writing, within 14 (fourteen) calendar days from the date of this decision and in accordance with EIA Regulation 4(2) do the following: DEPARTMENT OF MINERAL RESOURCE

MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0700

TEL: 015 287 4700

2016-10-24

- 2.2 Notify all registered I&APs of -
 - 2.2.1 The outcome of the application;
 - 2.2.2. The date of the decision:
 - 2.2.3. The date of issue of the decision and;
 - ENVIRONMENTAL AUTHORISATION : GRANTE 2.2.4 The reasons for the decision as included in Annexure 1 and Departmental Standard Conditions REGIONAL MANAGER - E-1555in Annexure 2.
- 2.3 Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations,
- 2.4 Draw the attention of all registered I&APs to the manner in which they may access the decision.
- 2.5 Provide the registered I&APs with:
 - 2.5.1 Name of the holder (entity) of this EA
 - 2.5.2 Name of the responsible person for this EA
 - 2.5.3 Postal address of the holder;
 - 2.5.4 Telephonic and fax details of the holder and
 - 2.5.5 E-mail address of the holder if any.

COMMENCEMENT OF THE ACTIVITY (IES)

- 3.1 In order to ensure safety, all employees must be given the necessary personnel protective equipment (PPE).
- 3.2 This EA must be provided to the site operator and the requirements thereof must be made fully known to him or her.
- Hauling routes for construction vehicles and machinery must be clearly marked and appropriate signalling must be posted to that effect. Furthermore, movement of construction vehicles and machinery must be restricted to areas outside of the drainage line or wet areas.

- 3. 4 Appropriate notification sign must be erected at the construction site, warning the public (residents, visitors etc.) about the hazard around the construction site and presence of heavy vehicles and machinery.
 - 3.5 Construction must include design measures that allow surface and subsurface movement of water along the drainage lines so as not to impede natural surface and subsurface water flow, and drainage measures must promote the dissipation of storm water runoff.
- 3.6 Vegetation clearance must be limited areas where the individual activities will occur, and mitigation measures must be implemented to reduce the risk of erosion and alien species invasion.
- 3.7 The holder of EA must note that in terms of the National Forest Act (Act No.84 of 1998) protected plant species, also listed in Limpopo Environmental Management Act (Act no.7 of 2003) must not be cut, disturbed, damaged, destroyed and their products must not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the Department of Agriculture, Forestry and fisheries.
- 3.8 Construction areas (e.g. material lay down areas), topsoil and subsoil must be protected from contamination or pollution. Stockpiling must not take place in drainage lines or areas where it will impede surface water runoff.

 2016 -10 2 4
- 3.9 If any soil contamination is noted at any phase of the proposed activity (ies), the contaminated soil must be removed to a licensed waste disposal facility and the site must be rehabilitated to the satisfaction of the Department and Department of Water and Sanitation. The opportunity for the onsite remediation and re-use of contaminated soil must be investigated prior to the disposal and this Department must be informed in this regard.
- 3.10 An integrated waste management approach must be implemented that is based on waste minimization and must incorporate avoidance, reduction, recycling, treat, reuse and disposal where appropriate. Uncontaminated rubble generated on the premises can be re-used as back filling material on site. Ensure that no refuse or rubble generated on the premises is placed, dumped or deposited on the adjacent properties or public places and open space.
- 3.11 In terms of sections 28 and 30 of NEMA, and sections 19 and 20 of the National Water Act, 1998 (Act No. 36 of 1998), any costs incurred to remedy environmental damage must be borne by the person responsible for the damage. It is therefore imperative that the holder of the EA reads through and understand the legislative requirements pertaining to the project. It is the Applicant's responsibility to take reasonable measures which include informing and educating contractors and employees about environmental risks of their work and training them to operate in an environmentally acceptable manner.
 - 3.12 Construction vehicle must be serviced and maintained in the manner whereby no excessive smokes and noise production is reduced to acceptable levels, and to prevent oil leaks. Contaminated soil must be remediated on site or removed to an authorised landfill site.
 - 3.14 Residents (if any) on the property (ies) and surrounding areas must be informed if any unusually noisy activities are planned.
 - 3.15. Dust suppression measures must be implemented on all exposed surface to minimize and control airborne dust.

- 3.16 Mixing of cement, concrete, paints, solvent, sealants and adhesive must be done in specified areas on concrete aprons or on protected plastic linings to contain spillage or overflow onto soil to avoid contamination of underground water and environmental damage.
- 3.17 Should any heritage remains be exposed during operation or any actions on the site, these must immediately be reported to the South African Heritage Resource Agency (SAHRA) and or Limpopo Heritage Resource Agency (LIHRA) (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from the South African Heritage Resource Agency (SAHRA) and or Limpopo Heritage Resource Agency (LIHRA).

Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; middens, indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials. A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

- 3.18 Care must be taken to ensure that the material and excavated soil required for backfilling are free of contamination from hydrocarbons.
- 3.19 Hydraulic fluid or chemicals required during construction must be stored in a concrete lined surface with bund walls and shall be designed in such a manner that any spillage can be contained and reclaimed without any impact on the surrounding environment. Should any spills occur it should be cleaned immediately by removing spillage together with the polluted solids and dispose it in the authorised disposal site permitted of such waste. The regional office of the Department of Water and Sanitation must be notified within 24 hours of an incident that may pollute surface and underground water resources.
- 3.20 Chemical sanitation facilities or system such as toilets that do not rely on the seepage of liquids must be provided with a ratio of 1 for every 15 workers. These must be placed such that they prevent spills or leaks to the environment and must be maintained according to the operating instructions and the content thereof must be disposed of at an authorised waste water treatment works.
- 3.21 The holder of EA must ensure that any water uses listed in terms of Section 21 of National Water Act must get authorization from Department of Water and Sanitation prior to the commencement of such activity (ies).
- 3.22. This EA does not purport to absolve the holder of EA from its common law obligations towards the owner of the surface of land affected.
- 3.23. The holder of EA must ensure that rehabilitation of the disturbed areas caused by operation at all times comply with the approved EMPr.
- 3.24. This EA may be amended or withdrawn at any stage for non-compliance and provides no relief from the provisions of any other relevant statutory or contractual obligations.
- 3.25. The holder of EA must note that in terms Section 43A of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008), residue deposit and residue deposit must be deposited and managed in a prescribed manner on any site demarcated for that purpose in the Environmental Management Plan or Environmental Management Programme. No person may temporary or

- permanently deposits residue stockpile or residue deposit on any area or site other than on site indicated on the Environmental Management Plan or Environmental Management Programme.
- 3.26. The holder of EA must note that in terms Section 20 of the National Environmental Management: Waste Act, 2008 (Act No.59 of 2008), no person may commence, undertake or conduct a waste management activity, except in accordance, with the requirements of norms and standards determined in terms of Section 19 (3) for that activity or a waste management licence is issued in respect of that activity if licence is required.
- 3.27. An appeal under Section 43 (7) of the National Environmental Management Act (NEMA), Act 107 of 1998 (as amended) suspend an EA or exemption or any provisions of conditions attached hereto, or any directive unless the Minister directs otherwise.
- 3.28 Should you be notified by the Minister of a suspension of the authorisation pending appeal procedure, you may not commence with the activity (ies) until such time that the Minister allows you to commence with such activity (ies) in writing.
- 3.29 The Department reserves the right to audit and/or inspect the activity (ies) without prior notification at any reasonable time and at such frequency as may be determined by the Regional Manager.

 DEPARTMENT OF MINERAL RESOURCES
- 3.30 The waste storage site must have a firm, impermeable, chemical resistant floors and a roof to prevent direct sunlight and rain water from getting in contact with the waste: 15 287 4700
- 3.31 The storage of hydrocarbons must have bund walls with adequate capacity to contain the wall with adequate capacity to contain the maximum volume that is stored in the area. Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the storage site.
- 3.32 Subject to the commencement and duration requirements of the MPRDA and NEMA for the listed mining activity is valid for the period for which the aforesaid right is granted provided that this activity must commence within 10 years. If the commencement of the proposed activity does not occur within the specified period, the EA lapses and a new application for EA in terms of the NEMA and the EIA Regulations should be made for the activity to be undertaken.
- 3.33 The commissioning and decommissioning of individual activity within the overall listed mining activity must take place within the phases and timeframes as set out in EMP or EMPr.
- 3.34 This EA will only be effective on the event that a corresponding right is issued in terms of MPRDA as amended and none of the activities listed in this EA may commence without right.
- 3.35 The listed activity (ies), including site preparation, must not commence within 20 (twenty) calendar days of the date of the notification of the decision being sent to the registered I&APs. In the event that an appeal is lodged with the appeal administrator, the effect of this environmental authorisation is suspended until such time as the appeal is decided.
- 3..36 Should there be any conflicting conditions between this EA and other approval granted by other authorities, it is upon the holder of EA to bring it to the attention of the Department for resolution.

MANAGEMENT OF ACTIVITY (IES)

4.1 A copy of the EA and EMPr must be kept at the property or on site office where the activity (lies) will be undertaken. The EA and EMPr must be produced to any authorised officials of the Department

who request to see it and must be made available for inspection by any employee or agent of the holder of the EA who works or undertakes work at the property (ies).

- 4.2. The content of the EMPr and its objectives must be made known to all contractors, subcontractors, agent and any other people working on the site, and any updates or amendments to the EMPr must be submitted to the Department for approval.
- 4.4 Regular monitoring and maintenance of storm water drainage facilities must be conducted at all times, if damaged as directed by the Department or any other relevant authority.
- 4.5 A buffer zone of 100 metres between the activity (ies) and the residential areas, cemeteries or burial grounds must be clearly demarcated and maintained.
- 4.6 The holder of the EA must prevent nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards.
- 4.7 The holder of the EA must ensure that all non-recyclable waste are disposed of at waste management facilities licenced to handle such wastes and all recyclable waste are collected by licenced waste management facilities for recycling, reuse or treatment.

MENT OF MINERALES

- The holder of the EA must ensure that all liquid wastes, whose emissions to water or land could cause pollution are diverted to sewer, after testing water quality and receiving written approval from the relevant local authority.
- 4.9 Non-compliance with any condition of this EA or EMPr may result in the issuing of a directive in terms of section 28 and or a compliance notice in terms of section 31L of NEMA CERD
- 4.10 This EA only authorises activities specified in the EMPr /closure plan and a new authorisation must be applied for in respect of any new activity not specified as part of the EMPr
- 4.11 Only listed activities that are expressly specified in the EMPr that forms part of this EA may be conducted, and additional or new activities not specified herein must be applied for by the holder and authorised by the competent authority in the form of an amendment to the aforesaid EMPr before such activities may be commenced with. This condition is also applicable in the case of the amendment, addition, substitution, correction, removal or updating of any detail in the aforesaid EMPr.
- 4.12 Rehabilitation of the disturbed surface caused by operation at all times must comply with the approved EMPr.
- 4.13 The Holder of EA must ensure that the name and contact details of the ECO is made available to the Regional Manager within 30 days of commencement. The holder of EA must also ensure that an ECO is always available on site to ensure that activity (ies) at all times comply with the issued EA and approved EMPr.

4.14 The ECO must:

- 4.16.1. Keep and maintain a detailed incidents register (including any spillages of fuels, chemicals or any other material
- 4.16 2. Keep a complaint register on site indicating the complaint and how the issues were addressed, what measures were taken and what the preventative measures were implemented to avoid reoccurrence of complaints.

- 4.16.3 Keep records relating to monitoring and auditing on site and avail them for inspection to any relevant authorised officials.
- 4.16.4. Keep copies of all environmental reports submitted to the Department.
- 4.16.5. Keep the records of all permits, licences and authorisations required by the operation.
- 4.16.6. Compile a monthly monitoring report and make it available to the Department if requested.
- 4.15 The duties and responsibility of the ECO should not be seen as exempting the holder of the EA from the legal obligations in terms of the NEMWA and NEMA
- 4.16 The footprint of the activity (ies) must be limited on the areas authorised for the actual construction works and operational activities and all areas outside of the footprint must be regarded as a "no go" areas.
- 4.17 Erosion and soil loss must be prevented by minimizing the construction site exposed to surface water run-off. Where necessary erosion stabilizing action such as gabions or re-vegetation must be implemented to prevent further habitat deterioration.
- 4.18 The holder of the EA must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimize the risk involved. Records of training and verification of competence must be kept by the holder EA.NT OF MINIMALIAN SECONDARY OF MINIMALIAN SECONDARY
- 4.20 In order to prevent nuisance conditions, the holder of the EA must ensure that all storage skips and bins are not overfilled.

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5 REPORTING TO THE DEPARTMENT

5. 5.1 The holder of EA must:

5.1.1 submit and Environmental Audit Report to this Department biennially and such report must be done by qualified Environmental Assessment Practitioner and must the audit report must specify whether conditions of this environmental authorisation and EMPr/closure plan are adhered to;

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- 5.1.2 identify and assess any new impacts and risks as a result of undertaking the activity/ies, if applicable:
- 5.1.3 identify shortcomings in the EMPr/closure plan, if applicable;
- 5.1.4. identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr/closure plan;
- 5.1.5 if applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate;
- 5.1.6 Specify the name of the auditor and
- 5.1.7 Be submitted by the holder to the competent authority within 30 days from the date on which the auditor finalised the audit.

- 5.2 Should any shortcomings in terms of Regulation 34(4) be identified, the holder must submit recommendation to amend the EMPr/closure plan in order to rectify any shortcomings identified with the aforementioned audit report.
- 5.3 Any complaint received from the I&AP during all phases of the operation must be attended to as soon as possible and addressed to the satisfaction of all concerned interested and affected parties.
- 5.4. The holder of the EA must annually assess the environmental liabilities of the operation by using the master rates in line with the applicable Consumer Price Index (CPI) at the time and address the shortfall on the financial provision submitted in terms of section 24P of NEMA.
- 5.5 The holder of the EA must, within 24 hours of incidents occurring, notify the Competent Authority of the occurrence or detection of any incident on the site, or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution.
- 5.6 The holder of the EA must, within 14 days, or a shorter period of time, if specified by the Competent Authority from the occurrence or detection of any incident referred to in condition 5.5, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Competent Authority of measures taken to MENT OF MINERAL RES MINE ENVIRONMENTAL MANAGEMENT PRIVATE BAG X 9467 : POLOKWANE : 0750 TEL: 015 287 4700
- 5.6.1.1 Correct the impact resulting from the incident;

5.6.1.2 Prevent the incident from causing any further impact; and

5.6.1.3 Prevent a recurrence of a similar incident.

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5.7 In the event that measures have not been implemented within 21 days of the incident referred to in condition 5.6, or measures which have been implemented are inadequate, the Competent Authority may implement the necessary measures at the cost of the holder of the EA.

6. SITE SECURITY AND ACCESS CONTROL

- 6.1 The holder of the EA must ensure effective access control on the site to reasonably prevent unauthorised entry. Signs indicating the risks involved in unauthorised entry must be displayed at each entrance.
- 6.2 Weather proof, durable and legible notices in at least three official languages applicable in the area must be displayed at each entrance to the Site. These notices must prohibit unauthorised entry and state the hours of operation, the name, address and telephone number of the holder of the EA and the person responsible for the operation of the site.

7. EMERGENCY PREPAREDNESS PLAN

- The holder of the EA must maintain and implement an emergency preparedness plan and review it biennially when conducting audit and after each emergency and or major accident. The plan must, amongst others, include:
 - 7.1.1 Site Fire
 - 7.1.3 Spillage
 - 7.1.3 Natural disasters such as floods
 - 7.1 4 Industrial action

- 7.1.5 Contact details of police, ambulances and any emergency centre closer to the site.
- 7.2 The holder of EA must ensure that an up to date emergency register is kept during all phases of the operation. This register must be made available upon request by the department.

8. INVESTIGATIONS

- 8.1 If, in the opinion of the Competent Authority, nuisances or health risks may be or is occurring on the site, the holder of the EA must initiate an investigation into the cause of the problem or suspected problem.
- 8.2 If, in the opinion of the Competent Authority, pollution may be or is occurring, the holder of the EA must initiate an investigation into the cause of the problem or suspected problem. Such investigation must include the monitoring of the water quality variables, at those monitoring points and such frequency as may be specified by the Competent Authority.
- 8.3 Investigations carried out in terms of conditions 8.1 and 8.2 above must include the monitoring of the relevant environmental pollution, nuisance and health risk variables, at those monitoring points and such frequency to be determined in consultation with the Competent Authority PRIVATE BAG X 9467: POLOKWANE: 0700
- 8.4. Should the investigation carried out as per conditions 8.1 and 8.2 above reveal any unacceptable levels of pollution, the holder of the EA must submit mitigation measures to the satisfaction of the Competent Authority.

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COMMISSIONING AND DECOMMISSIONING

9.1 The commissioning and decommissioning of individual activity within the overall listed mining activity must take place within the phases and timeframes as set out in EMP or EMPr.

10. SITE CLOSURE

- 10.1 The holder of EA must apply for a closure certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended within 180 days of occurrence of lapsing, abandonment, cancellation, cessation, relinquishment and completion of development.
- 10.2 The application for closure indicated above must be submitted together with all relevant documents as indicated in Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002), as amended.
- 10.3 No exotic plants may be used for rehabilitation purposes only indigenous plant can be utilized for rehabilitation purposes.
- 10.4 The holder of EA remains responsible for any environmental liability, pollution or ecological degradation, the pumping and treatment of extraneous water, compliance with the conditions of EA and the management and sustainable closure thereof until the Minister has issued a Closure Certificate in terms of Section 43 of Mineral and Petroleum Resources Development Act (Act 28 of 2002). Where necessary the Minister may retain certain portion of financial provision for residual, health or environmental impacts that might be known in future.

11. NEMA PRINCIPLES

The NEMA Principles (set out in Section 2 of NEMA, which apply to the actions of all Organs of State, serve as guidelines by reference to which any Organ of State must exercise any function when taking

any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment:
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between Organs of State through conflict resolution procedures; and
- the selection of the best practicable environmental option.

12. DISCLAIMER

The Department of Mineral Resources in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

13. RECOMMENDATIONS

In view of the above the NEMA principles, compliance with the conditions stipulated in this EA, and compliance with the EMPr/closure plan, the competent authority is satisfied that the proposed listed activity/ies will not conflict with the general objectives of Integrated Environmental Management stipulated in Chapter of NEMA, and that any potentially detrimental environmental impacts resulting from the listed activity/les/can be mitigated to acceptable levels. The authorisation is accordingly granted.

Your interest in the future of our environment is appreciated.

Kind Regards

REGIONAL MANAGER: MINERAL REGULATION

LIMPOPO REGIONAL OFFICE DATE 24 OCTOBER 2016

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