



# mineral resources

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

Private Bag X 6093 Kimberley, 8300; Tel: 0538071700; Fax: 0538328593  
65 Phakamile Mabija, 1<sup>st</sup> Floor Permanent Building, Kimberley 8300

Enquiries: Kgaudi Shapo Ref No: NC 30/5/1/2/2/ 00039 MR (069MR)  
E-mail address: kgaudi.shapo@dmr.gov.za  
Mine Environmental Management

## REGISTERED MAIL

**The Directors**

**Sishen Iron Ore Company (Pty) Ltd (Kolomela Mine)**

**Private Bag X3003**

**Postmasburg**

**8420**

For attention: Mr. Jaco Lambrechts

Fax no: jaco.lambrechts@angloamerican.com

**AMENDEMENT OF ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (NEMA) AS AMENDED, AND THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 ON FARM NO.476; 485; 486; REMAINDER OF PLOEGFONTEIN NO. 487; REMAINDER OF LEEUWFONTEIN NO; REMAINDER OF PORTION 1, 2, AND 3 OF KAPSTEVEL NO.541 ALSO STRYDFONTEIN NO.614, SITUATED IN THE MAGISTRAL DISTRICT OF HAY, NORTHERN CAPE REGION.**

With reference to the abovementioned application, please be advised that the Department has decided to grant an integrated environmental authorisation in terms of Section 24 L of National Environmental Management Act (Act 107 of 1998). The integrated 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, of the date of the Department's decision in respect of your application and the provisions regarding the making of appeals 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, within 20 days from the date of notification, and such appeal must be lodged as prescribed by Chapter 2 of the Appeal Regulation of 2014, by means of one of the following methods:

By post: Attention: Appeals Directorate and Legal review

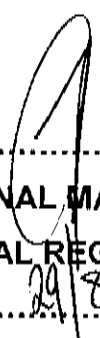
The Minister of Department of Environmental Affairs  
Private Bag X 447  
PRETORIA  
0001

By facsimile: (012) 359 3609; or By hand: Environmental House, Corner Steve Biko and Soutspanberg, Arcadia, Pretoria, 0083

An electronic copy (word document format) of the appeal and its supporting documents must also be submitted to Mr Ziyaad Hassam.

A prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail: [appealsdirectorate@environment.gov.za](mailto:appealsdirectorate@environment.gov.za).

Kind Regards

.....  
  
**REGIONAL MANAGER**  
**MINERAL REGULATION: NORTHERN CAPE REGION**  
DATE: 29/8/2017 .....



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Mineral Resources  
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65 Phakamile Mabija, 1<sup>st</sup> Floor Permanent Building, Kimberley 8300

## INTERGRATED ENVIRONMENTAL AUTHORISATION

**Reference number:** NC30/5/1/2/2/00039 MR or 069MR

**Last amended:** 30 October 2015

**Holder of authorisation:** Sishen Iron Ore Company (Pty) Ltd ( Kolomela Mine)

**Location of activity:** On Farm No.476, 485, 486, remainder of Ploegfontein No.487; remainder of Leeuwfontein No.488; remainder of portion 1, 2, and 3 of Kapstevl no.541 also Strydfontein no.614, situated in the Magisterial District of Hay, Northern Cape Region.

### DECISION

#### ACRONYMS

**NEMA:** The National Environmental Management Act, 1998 (Act 107 of 1998), as amended

**NEMWA:** National Environmental Management Waste Act, 2008 (Act 59 of 2008), as amended

**EIA:** Environmental Impact Assessment.

**EIA REGULATIONS:** EIA Regulations, 2014.

**DEPARTMENT:** Department of Mineral Resources.

**IEA:** Integrated Environmental Authorisation.

**EMPr:** Environmental Management Programme

**BAR:** Basic Assessment Report

**S&EIR:** Scoping and Environmental Impact Report

**I&AP:** Interested and Affected Parties

**ECO:** Environmental Control Officer

**MPRDA:** Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), as amended

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake **NEMA EIA** and **NEMWA EIA** listed activity (ies)

specified below. Details regarding the basis on which the Department reached this decision are set out in Annexure "I" of this integrated environmental authorisation.

#### ACTIVITY APPLIED FOR

By virtue of the powers conferred on it by NEMA and NEMWA, the Department hereby **Grants** an application for amendment of IEA by **Sishen Iron Ore Company (Pty) Ltd (Kolomela Mine)** with the following contact details –

The Directors

Sishen Iron Ore Company (Pty) Ltd (Kolomela Mine)

Private Bag X3003

Postmasburg

8420

For attention: Mr Jaco Lambrechts

Fax no: [jaco.lambrechts@angloamerican.com](mailto:jaco.lambrechts@angloamerican.com)

to undertake the following activities listed in the NEMA EIA Regulation and NEMWA.

#### **NEMA: LISTED ACTIVITIES:**

##### **Listed in the EIA Regulations R. 983 of EIA, 2014 as:-**

Activity 12- The development of (xii) infrastructure or structures with a physical footprint of 100 square meters or more; where such a development occurs (a) within a watercourse.

Activity 13- The development of facilities or infrastructure for the off-stream storage of water, including dams and reservoirs, with a combined capacity of 50 000 cubic metres or more.

Activity 24- The development of – (ii) a road with a reserve wider than 13.5 meters, or where no reserve exists where the road is wider than 8 meters.

Activity 56 – The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre- (ii) where no reserve exists, where the road is wider than 8 metres.

Activity 18 (i) - "The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from a watercourse";

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

Activity 4- The development of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of more than 500 cubic metres.

Activity 6-The development of facilities or infrastructure for any process or activity which requires a permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent.

Activity 15- The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for- (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.

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 No. 28 of 2002).

Activity 21- An activity including the operation of that activity associated with the primary processing of a mineral resource including winning, reduction, extraction, classifying, concentrating, crushing, screening and washing but excluding the smelting, beneficiation, refining, calcining or gasification of the mineral resource.

Activity 28- Commencing of an activity, which requires an atmospheric emission license in terms of section 21 of the National Environmental Management: Air Quality Act, (Act No.39 of 2004), excluding:

- (i) activities which are identified and included in listing Notice 1 of 2014;
- (ii) activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act 2008 applies; or
- (iii) the development of facilities or infrastructure for the treatment of effluent, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less.

**Listed in the NEMWA Activities (Act No. 26 of 2014 National Environmental Management: Waste Amendment Act, 2014) as amended**

**Category A**

Residue deposits and residue stockpiles include: 1) Wastes resulting from exploration, mining, quarrying, and physical and chemical treatment of minerals:

- (a) wastes from mineral excavation
- (d) wastes from drilling muds and other drilling operations.

12. Oil wastes and wastes of liquid fuels (except edible oils)

- (a) waste hydraulic oils
- (b) waste engine, gear and lubricating oils
- (d) oil/water separator contents
- (e) wastes of liquid fuels
- (f) hazardous portion of other oil wastes

**Detailed specifications of the activity are as follows:**

|  |
|--|
| <b>Proposed new pit details are as follows:</b>                                    |
| Kapstevél South pit will be 147ha  |
| Ploegfontein and Tierbult Pit will be 165ha  |
| <b>Proposed Evaporation pond details are as follows:</b>                           |
| Kapstevél South Evaporation pond will be 22ha                                      |
| New Ploegfontein Evaporation pond will be 10 ha                                    |
| <b>Proposed haul road details are as follows:</b>                                  |
| New haul road to Ploegfontein pits will be 15ha                                    |
| New haul road to Klipbankfontein pit and Leeuwfontein South WRD will be 11ha       |
| <b>Proposed Waste Rock Dump (WRD) details are as follows:</b>                      |
| Extension of approved Kapstevél WRD will be 546ha extension area.                  |
| Extension of approved Leeuwfontein North WRD will be 408ha extension area.         |
| Extension of approved Leeuwfontein South WRD will be 200ha extension area          |
| Amendment of the approved Klipbankfontein Waste Rock Dump will be 486ha            |
| <b>Proposed DMS processing plant and product stockpile details are as follows:</b> |
| New Kapstevél DMS Processing plant and product stockpile area will be 24ha         |
| New Tierbult DMS processing plant will be 12ha                                     |
| New Klipbankfontein DMS Processing Plant will be 12ha                              |
| New product stockpile area at existing DSO processing plant will be 44ha           |
| <b>Proposed conveyor details are as follows:</b>                                   |
| New conveyor from Kapstevél at pit facility to load out station will be 3ha.       |

|   |
|---|
| <b>Proposed Pit facility (parking, fatigue centre, workshops and refuelling area) details are as follows:</b> |
| New Kapsteval at pit facility (parking, fatigue centre, workshops and refuelling area) will be 112ha          |
| New klipbankfontein at pit facility (parking, fatigue centre, workshops and refuelling area) will be 48ha     |
| <b>Proposed explosives Magazine details are as follows:</b>   |
| New explosives Magazine will be 5ha   |
| <b>Proposed sewage treatment works details are as follows:</b>  |
| New sewage treatment works will be 5ha  |
| <b>Proposed aquifer recharge facility details are as follows:</b>   |
| New aquifer recharge facility will be 100ha   |
| <b>Proposed dewatering details are as follows:</b>  |
| 14 boreholes and surface pipelines  |

The granting of this amendment of IEA 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 IEA is hereby approved and must be adhered to throughout the life cycle of the operation.

#### **EA SITE SPECIFIC CONDITIONS**

1. This environmental authorisation is conditional upon the implementation of the approved EMPr.
2. The holder of the EA must notify the Department in writing during issuing of amended EA, if any condition of the amended EA cannot be or is not adhered to. Any notification in terms of this condition(s) must be accompanied by reasons for the non-compliance. Non-compliance with a condition of this amended EA may result in criminal persecution or other action provided for in NEMA and EIA Regulation.
3. This amended EA will only be effective in the event that a corresponding right is issued in terms of the MPRDA and none of the listed activities in this amended EA may commence without such right being issued. Subject to the commencement and duration requirements of the MPRDA, the amended EA 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. The commissioning and decommissioning of individual

activities within the overall listed mining activities must take place within the time periods as set out in the EMPr.

4. The listed activity, 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 Interested and Affected Parties ("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.
5. The holder is responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder. It is the contractors and company responsibility that all staff/employees are familiar with all the emergency procedures.
6. The holder of the EA must implement an Emergency Preparedness Plan and review it annual/biennially when conducting audit and after each emergency and major incident. The holder must notify the competent authority in writing, within 24 hours thereof of the occurrence.
7. Only activities that are expressly specified in the EMPr that forms part of this authorisation 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 or an addendum 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, and removal or updating of any detail in the aforesaid EMPr.
8. Whenever any of the applicant's contact details, physical or postal address and/ or telephonic details change, the applicant must notify the competent authority in writing to that effect.
9. Non-compliance with a condition of this environmental authorisation 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.
10. Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority (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 Provincial Heritage Resources Authority. Heritage remains include: archaeological remains (including fossil bones and fossil shells); coins; 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.

11. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, for the all phases/ of implementation before commencement of any land clearing or construction/ expansion/ decommissioning activities to ensure compliance with the EMPr/closure plan and the conditions contained herein.
12. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation. The burning of waste on site is prohibited
13. On the comments from South African Heritage Resources Agency (SAHRA) dated 07 October 2016 stipulated that: Palaeontological Impact Assessment (PIA) must be conducted by a professional qualified palaeontologist prior to construction activities commence. PIA must be submitted to SAHAR for comment prior to construction. No construction activities may commence without comments from SAHRA;
  - Permits in terms of section 35 of the National Heritage Resources Act, 1999 (Act 25 of 1999) (NHRA) must be applied for sites KOL1, KOL3, KOL5, KOL6 and KOL7 prior to construction activities commencing. The permit must be applied for by a qualified professional archaeologist;
  - The layout of the KKS Waste Rock Dump and Floradale Aquifer Recharge Project must be altered to allow for the recommended bufferzones as detailed in the HIA around site Kol4. Should this not be possible the relevant permits in terms of section 34, 35 and 36 of the NHRA Regulation;
  - The specifically cited mitigation measures in the HIA as included in the 2011 HMP are valid and must apply to the proposed mining expansion activities;
  - The fine EIA/EMPr and all appendices must be submitted to SAHRA and uploaded to the case file;



- If any evidence of archaeological sites or remains (e.g. remnants of stone-made structures, indigenous ceramics, bones, stone artefacts, ostrich eggshell fragments, charcoal and ash concentrations), fossils or other categories of heritage resources are found during the proposed development, SAHRA APM Unit must be alerted. If unmarked human burials are uncovered, the SAHRA Burial Grounds and Graves Unit, must be alerted immediately.
14. The regulation on the use of water for mining and related activities aimed at the protection of the Water Resources as published in the Government Notice No.704 on 4 June (Government Gazette No.20119) must be complied with". Buffer zones around remaining wetland pans (not to be disturbed) to be left based on the catchments defined for such pans. This amended EA does not absolve the holder of its obligation to comply with the requirements of the National Water Act and any other applicable legislation.
  15. The applicable requirements with respect to relevant legislation pertaining to cutting, damaging, disturbing or destroying protected trees or trees from a natural forest must be adhered to.
  16. The safety of the participants must be ensured by involving qualified engineer in the design and erection of the structure (s), have regular safety inspections and ensuring participants are equipped with necessary safety equipment.
  17. The holder must adhere to the recommendations of the fauna and flora report compiled by Omni Eko which state that: -
    - Permit to remove and / or destroy protected tree species (Camel Thorn, Grey Camel Thorn (*Vachellia haematoxylon*) and Sheperd's Tree will have to be obtained from the Department of Agriculture, Forestry and Fisheries, Northern Cape.
    - Permits to remove and/or destroy *Boophone disticha*, *Hoodia gordonii* and *Pachypodium succulentum* must be obtained from the Northern Cape Department of Tourism, Environment and Conservation (DTEC).
    - Each site should therefore be evaluated and control measures must be based on site and specific situations.
    - Sensitive area must be clearly demarcated to prevent damage.
    - The pits and areas of mining activity at Ploegfontein must be fenced to prevent any access and damage to sensitive area.
  18. The applicable requirements with respect to relevant legislation pertaining to occupational health and safety must be adhered to.

19. The commissioning and decommissioning of individual activities within the overall listed mining activities must be conducted as stipulated in site-wide operational rehabilitation strategy for Kolomela mine (Appendix J).
20. The hydraulic fluids or chemicals required during mining 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 the spillage together with the polluted solid and dispose it in an authorised disposal site permitted to dispose of such waste.
21. Mining vehicles must be serviced and maintained in a manner whereby excessive smoke and noise production is reduced to acceptable levels, and to prevent oil leaks. Drip trays or concrete lined surface must be placed under each stationary equipment or vehicles to avoid soil contamination which may lead to water pollution. The company must adhere to the traffic impact assessment recommendation.
22. The holder must note that in terms of the National Forest Act (Act No. 84 of 1998); protected plant species must not be cut , disturbed, damaged, destroyed, and their product must not be possessed, collected, removed, transported, exported, donated, purchased or sold unless permission is granted by the Department of Agriculture, Fisheries and Forestry. Vegetation clearing must be kept to an absolute minimum. Mitigation measures must be implemented to reduce the risk of erosion and the invasion of alien species.
23. If any soil contamination is noted during mining period of the proposed activities, the contaminated soil must be removed to a suitable waste disposal facility and the site must be rehabilitated to the satisfaction of the competent authority and Department of Water and Sanitation. The opportunity for the on-site remediation and re-use of contaminated soil must be investigated prior to disposal and this competent authority must be informed in this regard.
24. On the mining area topsoil, sub soil must be protected from contamination or pollution and stockpiling must not take place in drainage lines or where it would impede surface water runoff.
25. Appropriate notification signs must be erected at the mining area, warning the public (residents, visitors etc.) about the hazards around the mining area and presence of heavy vehicles and machinery.



26. In order to ensure their safety, all employees must be given the necessary personal protective equipment.
27. Any complaints received from the interested and affected parties (I&APs) during the mining activities must be attended to as soon as possible and addressed to the satisfaction of all concerned I&AP's.
28. The holder of the amended IEA must ensure that an up to date emergency register is kept during the mining activities. The emergency register must be made available upon request by the department.
29. The holder as the case may be, must apply for a closure certificate upon the lapsing, abandonment or cancellation of the right in question, cessation of the prospecting, and the relinquishment of the portion of the mining of the land to which a right was issued. An application for a closure certificate must be made to the Regional Manager in whose region the land in question is situated within 180 days of the occurrence of the lapsing, abandonment, cancellation, cessation, and relinquishment.
30. No closure certificate may be issued unless the Chief Inspector of Mine and the Department of water and sanitation have confirmed in writing that the provisions pertaining the health and safety and management of potential pollution to water resources have been addressed.
31. Notwithstanding the provision of any other law, no person is civilly or criminally liable or may be dismissed, disciplined, prejudiced or harassed on account of having refused to perform any work if the person is good faith and reasonable believed at the time of the refusal that the performance of the work would result in an imminent and serious threat to the environment.



**ANNEXURE 1****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 it 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).
- 1.6. The holder of EA must ensure that all areas where the authorised activities occur have controlled 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 of the date of this decision and in accordance with EIA Regulation 4(2)
- 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;



2.2.4 The reasons for the decision as included in Annexure 1 and Departmental Standard Conditions in 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.

### **3 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.

3.3 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 IEA must note that in terms of the National Forest Act (Act No.84 of 1998) protected plant species, also listed in Northern Cape Department of Tourism, Environmental and Conservation (DTEC) 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.
- 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 Provincial Heritage Resources Authority (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 Provincial Heritage Resources Authority.

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.
- 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.
- 3.31 The storage of hydrocarbons must have bund walls 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 rights is issued in terms of MPRDA as amended and none of the activities listed in this IEA 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.



#### 4. 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 (ies) 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.
- 4.8 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.
- 4.10 The holder of the authorisation must appoint an independent auditor to audit the site annually/biennially. This auditor must compile an audit report documenting the findings of the audit. The audit report must:
- specifically state whether conditions of this environmental authorisation and EMPr/closure plan are adhered to;



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

4.11 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.

4.12 The holder of the environmental authorisation 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.

4.13 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, and removal or updating of any detail in the aforesaid EMPr.

4.14 Rehabilitation of the disturbed surface caused by operation at all times must comply with the approved EMPr.

4.15 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.



4.16 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 re-occurrence 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.

16.17 The duties and responsibility of the ECO should not be seen as exempting the holder of the IEA from the legal obligations in terms of the NEMWA and NEMA


16.18 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.

4.19 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.

4.20 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 minimise the risk involved. Records of training and verification of competence must be kept by the holder EA.

4.21 In order to prevent nuisance conditions, the holder of the EA must ensure that all storage skips and bins are not overfilled.

## 5 REPORTING TO THE DEPARTMENT

5.1 The holder of EA must 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 EMP/closure plan are adhered to;

- 5.1.1 identify and assess any new impacts and risks as a result of undertaking the activity/ies, if applicable;
  - 5.1.2. identify shortcomings in the EMP/closure plan, if applicable;
  - 5.1.2 identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMP/closure plan;
  - 5.1.3 if applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate;
  - 5.1.4 Specify the name of the auditor and
  - 5.1.5 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 EMP/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 –
- 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.

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 IEA.

## **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**

7.1 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.

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.

## **DECOMMISSIONING**

9.1 The decommissioning of individual activities within the overall listed activities must take place within the time periods as set out in the 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

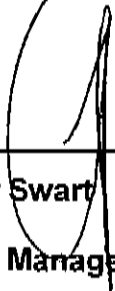
The Department of Mineral Resources in terms of the conditions of this environmental authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently 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. RECOMMENDATION**

In view of the above, the NEMA principles, compliance with the conditions stipulated in this EA, and compliance with the EMP/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 5 of NEMA, and that any potentially detrimental environmental impacts resulting from the listed activity/ies can be mitigated to acceptable levels. The authorisation is accordingly granted.

Kind Regards



Mr Pieter Swart

Regional Manager: Mineral Regulation (Northern Cape)

DATE OF DECISION:

29/8/2017**FOR OFFICIAL USE ONLY:****EIA REFERENCE NUMBER:**

NC 30/5/1/2/2/1 (00039MR) OR 069MR MEM