



mineral resources & energy

Department:
Mineral Resources and Energy
REPUBLIC OF SOUTH AFRICA

Private Bag X 9, Rogge Bay, 8012, Tel: 021 427 1000, Fax: 021 427 1046
Atterbury House, 9 Corner Riebeeck and Lower Burg Street, Cape Town, 8001
Enquiries: Mr. BP Mohasoa Email Address: Peter.Mohasoa@dmre.gov.za
Ref: WC30/5/1/2/2/10076MR
Sub-Directorate: Mine Environmental Management

BY EMAIL

The Directors
Imerys Refractory Minerals South Africa (Pty) Ltd
Princess Farm
P.O. Box 242
Heidelberg
6665

Attention: Helmut Gemurr
Cell: 060 983 0102
Email: Helmutt.Gemurr@imerys.com
Copied: Johmandie@enviro-eap.co.za

Dear Sir

ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED, READ WITH REGULATION 21 OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 AS AMENDED, FOR EXPANSION OF BENTONITE AND ZEOLITE MINING ACTIVITIES (ADDITIONAL QUARRIES) IN TERMS OF SECTION 102 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AS AMENDED, ON THE REMAINING EXTENT OF ERF 1412 AND ERF 3264 (PREVIOUSLY ERF 1412), SITUATED IN THE MAGISTERIAL DISTRICT OF SWELLENDAAM: WESTERN CAPE REGION.

With reference to the above-mentioned application, please be advised that the Department has decided to **grant** the integrated environmental authorisation in terms of the National Environmental Management Act (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 Forestry, Fisheries and Environment and a copy of such appeal to the Department of Mineral Resources and Energy (Western Cape 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 prescribed below:

Appeal to the Department of Forestry, Fisheries and Environment

Attention : Directorate Appeals and Legal Review
Email : appeals@dffe.gov.za
By post : Private Bag X 447, **Pretoria**, 0001
By hand : Environmental House, Corner Steve Biko and
Soutpansberg Street, Arcadia, **Pretoria**, 0083

Copy of the lodged appeal to the Department of Mineral Resources and Energy

Attention : Regional Manager: Western Cape Region
By facsimile : (021) 427 1046
E-mail : Pieter.Swart@dmre.gov.za
By post : Private Bag X 09, **Roggebaai**, 8012
By hand : Atterbury House, 9 Corner Riebeek and Lower Burg Street, **Cape Town**, 8001

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 Forestry, Fisheries and Environment.

Kind Regards


REGIONAL MANAGER: MINERAL REGULATION
WESTERN CAPE REGIONAL OFFICE
DATE:



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Private Bag X 9, Rogge Bay, 8012, Tel: 021 427 1000, Fax: 021 427 1046
Atterbury House, 9 Corner Riebeeck and Lower Burg Street, Cape Town, 8001

ENVIRONMENTAL AUTHORISATION IN TERMS OF SECTION 24 OF NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AS AMENDED, READ WITH REGULATION 21 OF THE ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REGULATIONS, 2014 AS AMENDED, FOR EXPANSION OF BENTONITE AND ZEOLITE MINING ACTIVITIES (ADDITIONAL QUARRIES) IN TERMS OF SECTION 102 OF THE MINERAL AND PETROLEUM RESOURCES DEVELOPMENT ACT, 2002 (ACT 28 OF 2002) AS AMENDED, ON THE REMAINING EXTENT OF ERF 1412 AND ERF 3264 (PREVIOUSLY ERF 1412), SITUATED IN THE MAGISTERIAL DISTRICT OF SWELLENDAAM: WESTERN CAPE REGION.

Reference number:	WC30/5/1/2/2/10076MR
Last amended:	Section 102 First Issue
Holder of authorisation:	Imerys Refractory Minerals South Africa (Pty) Ltd
Location of activities:	Remaining Extent of Erf 1412 and Erf 3264 (previously Erf 1412), situated in the Magisterial District of Swellendam.

DECISION

ACRONYMS

BAR:	Basic Assessment Report
DEPARTMENT:	Department of Mineral Resources and Energy
ECO:	Environmental Control Officer
IEA:	Integrated Environmental Authorisation
EA:	Environmental Authorisation
EIA(R):	Environmental Impact Assessment
EIA REGULATIONS:	EIA Regulations, 2014 as amended
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
I&AP:	Interested and Affected Parties
MPRDA:	Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002), as amended
NEMA:	National Environmental Management Act, 1998 (Act 107 of 1998), as amended
NEMWA:	National Environmental Management: Waste Act, 2008 (Act 59 of 2008), as amended
SAHRA:	South African Heritage Resources Agency
DWS:	Department of Water and Sanitation

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** listed activities specified below. Details regarding the basis on which the Department reached this granting decision are set out in **Annexure “1”** and **“2”** of this Environmental Authorisation.

ACTIVITY APPLIED FOR

By virtue of the powers conferred on it by NEMA, the Department of Mineral Resources and Energy hereby **grants** an Environmental Authorisation to **Imerys Refractory Minerals South Africa (Pty) Ltd** with the following contact details –

The Directors
Imerys Refractory Minerals South Africa (Pty) Ltd
Princess Farm
P.O. Box 242
Heidelberg
6665

Attention: Helmut Gemurr
Cell: 060 983 0102
Email: Helmutt.Gemurr@imerys.com
Copied: Johmandie@enviro-eap.co.za

to undertake the following activities listed in the NEMA: EIA Regulations:

LISTED ACTIVITIES AUTHORISED:

Listed Activities	Activity and/or project description
Activity 21D of Government Notice No. R 983 as amended by GN 517 of June 2021 Any activity including the operation of that activity which requires an amendment or variation to a right or permit in terms of section 102 of the Mineral and Petroleum Resources Development Act, as well as any other applicable activity contained in this Listing	Expansion of mining activities and additional quarries within the Mining Right Area.

Notice or in Listing Notice 3 of 2014, required for such amendment.	
Activity 12 of Government Notice No. R 983 as amended by GN 517 of June 2022 The development of – (xii) infrastructure or structures with a physical footprint of 100 square meters or more; or Where such development occurs – (c) if no setback exists, within 32 meters of a watercourse, measured from the edge of a watercourse.	Mining activities will be conducted within 32 meters of a drainage line.
Activity 28 of Government Notice No. R 983 as amended by GN 517 of June 2022 Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 where such development — (ii) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares, or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare Excluding where such land has already been developed for residential, mixed, retail, commercial, industrial, or institutional purposes.	Mining activities fall within industrial and commercial developments.

**Activity 17 of Government Notice No. R 984
as amended by GN 517 of June 2022**

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 28 of 2002), including associated infrastructure, structures and earthworks, directly related to 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).

Expansion of mining activities and additional quarries within the Mining Right Area.

Description of the activities are as follows:

(1) Current activities

- a) Imerys Refractory Minerals South Africa (Pty) Ltd is an existing Bentonite and Zeolite mining company operating on Remaining Extent of Erf 1412 and Erf 3264 (previously Erf 1412). A total area of 16.6ha has already been mined and rehabilitated on the property, a total quarry area of 1.96ha still remains to be mined under the current authorisation.
- b) Appendix B, map 6.1 and 6.2 shows mined out and rehabilitated quarries, that is:
 - Phase 1 to 15 – total area of 16.6ha
- c) Appendix B, map 6.1 shows quarries still be mined as approved in the existing authorisation, that is:
 - Phase 16 – 1ha
 - Phase 17 – 0.3ha
 - Phase 18 – 0.34ha
 - Phase 19 – 0.32ha

- d) Following investigations, the applicant has determined that there are additional viable Bentonite and Zeolite resources on the property hence the application of this Environmental Authorisation.

(2) Expansion of activities

- (a) Appendix B, map 7.4 and 7.5 shows additional quarries sought in this application, that is:
- Phase 20 – 1ha
 - Phase 21 – 0.73ha
- (b) Mining will be conducted by means of excavators, front-end loaders and 15-ton dumper trucks.
- (c) Topsoil and overburden removed and stockpiled separately along the perimeter of the quarry.
- (d) Bentonite mined will be trucked to the Processing Plant at the Head Office on Remaining Extent of Erf 1412, Heidelberg.
- (e) Overburden is mined in 20m wide and 3 – 4m thick benches to expose 3m of Bentonite down-dip to be mined. This process will be repeated until all Bentonite is mined out.
- (f) Through this process the **quarries depth** will be a maximum of **30m deep** and no more than half of a quarry size will be open at a time.
- (g) Rehabilitation takes place on an ongoing basis as mining proceeds. As the quarry advances along strike, the overburden is progressively replaced to backfill the excavation. Backfilled area is contoured to prevent erosion, which could be caused by rain and surface water flow.
- (h) Finally, topsoil is spread over the disturbed area to restore the land to its previous state.
- (i) No new access road will be constructed.
- (j) Site infrastructure will be limited to a chemical toilet and waste bins.

Site description and location:

The activities will be conducted on Remaining Extent of Erf 1412 and Erf 3264 (previously Erf 1412), situated in the Magisterial District of Swellendam: Western Cape. Refer to the **locality map on sheet 1 of 2 and sheet 2 of 2** of the EIAR/EMPr **signed** by the Regional Manager.



Site boundary coordinates

Mining Right Area: Remaining Extent of Erf 1412 and Erf 3264 (previously Erf 1412)

Point	Y	X
A	+ 5 260.40	+ 3 770 528.69
B	+ 4 963.85	+ 3 770 865.99
C	+ 4 299.66	+ 3 770 906.25
D	+ 3 983.54	+ 3 771 508.92
E	+ 3 889.91	+ 3 771 510.95
F	+ 4 014.03	+ 3 771 707.39
G	+ 4 120.85	+ 3 771 822.23
H	+ 4 231.72	+ 3 771 944.32
J	+ 4 507.03	+ 3 772 247.60
K	+ 4 275.55	+ 3 772 390.45
L	+ 4 176.15	+ 3 772 437.66
M	+ 4 217.70	+ 3 772 838.59
R	+ 4 357.97	+ 3 772 753.64
S	+ 4 842.84	+ 3 772 292.58
T	+ 5 080.10	+ 3 772 340.24
U	+ 5 259.74	+ 3 772 324.93
V	+ 5 578.68	+ 3 772 173.17
W	+ 5 659.20	+ 3 772 414.53
X	+ 6 488.17	+ 3 772 151.13
Y	+ 6 429.96	+ 3 771 427.16
Z	+ 5 643.60	+ 3 770 705.46

The SG codes for farm portion: C0700030000141200000

Additional quarries

Phase 20

Point	Y	X
A	+ 4 663.03	+ 3 771 249.73
B	+ 4 295.54	+ 3 771 223.67
C	+ 4 292.45	+ 3 771 247.70
D	+ 4 533.68	+ 3 771 270.92
E	+ 4 656.91	+ 3 771 274.76

Phase 21

Point	Y	X
A	+ 4 368.82	+ 3 771 929.55
B	+ 4 296.55	+ 3 771 980.94
C	+ 4 323.74	+ 3 772 013.96
D	+ 4 450.79	+ 3 771 972.60



The granting of this EA is subject to the conditions set out below (site specific) and in **Annexure 2** (Departmental Standard Conditions). The EMPr attached as part of the reports for the above development submitted as part of the application for an EA complies with Section 24N of NEMA, Appendix 4 of the EIA Regulations, 2014 as amended and is hereby approved and must be adhered to throughout the life cycle of the operation.



ENVIRONMENTAL AUTHORISATION SITE SPECIFIC CONDITIONS

1. Mining activities must be conducted in accordance with the approved EIAR/EMPR and attached site layout plan.
2. Double stripping rehabilitation technique must be undertaken. Stripping of topsoil layer followed by a second additional layer below the topsoil. Both of these layers must be stored separately and during rehabilitation the layers must be spread in their original sequence. Topsoil layer and subsoil layer must be stripped to a depth of approximately 30cm.
3. Topsoil, subsoil, and overburden must be stored separately and *visibly* demarcated as no-go areas. Effective storm-water runoff and erosion prevention measures must be implemented to prevent losses by water and/or wind erosion.
4. Stockpile material must not be more than 2m high.
5. Phase 20 and phase 21 excavation area must be 1ha and 0.73ha, respectively. The depth of the excavation must be restricted to 30m.
6. Establishment of a new access road is prohibited. Access to the mine area must be through approved existing access roads.
7. Establishment of site infrastructure must be restricted to sufficient chemical toilets and weather proofed waste bins.
8. A buffer zone of 8m between mining activities and the edge of indigenous vegetation must be *visibly* demarcated and maintained for the duration of the life of mine.
9. No drainage line or wetland areas edges may be disturbed or impacted upon by the mining activities.
10. If any groundwater is intercepted during mining activities, mining must immediately cease, and the Environmental Control Officer and/or Mine Manager must be informed, and the area must be rehabilitated to prevent potential pollution to the groundwater resources.



11. Alien invasive and weed vegetation monitoring and removal must be undertaken annually during mining and a year after mining activities have ceased on disturbed areas.
12. The milkwood trees recorded within the cultivated areas must be *visibly* demarcated within a 5m buffer radius before commencement of mining activities and must remain for the duration of the life of mine.
13. Environmental Control Officer must scan the mine area and surrounds prior to commencement of activities for the presence of Blue Crane, Denham's Bustard and Black Harrier breeding pairs. If identified, mining should only proceed after the chick fledging.
14. If any unexpected archaeological or paleontological material or evidence of burials is discovered during earth moving activities all works must be stopped and Heritage Western Cape (HWC) must be notified immediately by the on-site Environmental Control Officer.
15. Product material leaving the site must be covered with tarpaulin cloth during transportation to prevent blowing away by wind and causing pollution nuisance to other road users and the general public.



ANNEXURE 1: REASONS FOR THE DECISION

1. Key factors considered in making the decision.

All the information presented to the Department was taken into account during 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.

- 1.1. The information contained in the EA application lodged on **17th November 2021**.
- 1.2. The information contained in the Final Scoping Report compiled by the Environmental Assessment Practitioners Johmandie Pienaar from Enviro – EAP (Pty) Ltd, received by the Department on **04th February 2022**.
- 1.3. The information contained in the Final EIAR/EMPr compiled by the Environmental Assessment Practitioner Johmandie Pienaar from Enviro – EAP (Pty) Ltd, received by the Department on **27th May 2022**.
- 1.4. The information contained in the specialist reports and/or compliance statements received by the Department on **27th May 2022**. The following specialist reports and/or compliance statements are provided:
 - Heritage Impact Assessment (Appendix E6)
 - Paleontological Impact Assessment (Appendix D)
 - Agricultural Compliance Statement (Appendix E9)
 - Terrestrial Animal Species Compliance Statement (Appendix E10)
 - Terrestrial Plant Species Compliance Statement (Appendix E12)
 - Terrestrial Biodiversity Compliance Statement (Appendix E13)
- 1.5. The objectives and requirements of the applicable and relevant legislation, frameworks and development plans, policies and guidelines, and the EIA Regulations.
- 1.6. The environmental impacts associated with the proposed activity outlined in the EIAR and the proposed mitigation measures outlined in the EMPr.



- 1.7. Public Participation Process (PPP) report attached as Appendix F of the EIAR/EMPR. This includes comments from relevant competent authorities and Mine and Health Safety Inspectorate.
- 1.8. The Applicant has complied with Section 24P of the National Environmental Management Act, 1998 (Act 107 of 1998) and provided the financial provision for remediation of residual and latent impacts.

2. Findings

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

- 2.1. The environmental impact assessment identified and assessed all potential environmental impacts on the subject property(ies).
- 2.2. The assessment discussed the significance of each potential impact looking into the following aspects: (a) extent, (b) intensity, and (c) duration. The impacts range from low – medium – high, this is before application of mitigation and rehabilitation measures.
- 2.3. After application of mitigation measures and rehabilitation measures as provided by the EMPr and recommendations of the specialists, the significance rating of impacts (negative) is assessed as low.
- 2.4. The specialist reports and/or compliance statements provide the following:

2.4.1. Heritage Impact Assessment (Appendix E6)

- There is no identified formal cultural landscape in the area.
- There are no structures in the mining area today, and none are seen on the 1942 aerial photography.
- The mining area is of relatively small scale and in this instance, is invisible from the scenic route, and the town of Heidelberg due to intervening topography. The location within the incised valley, means that views from other local roads are likely to be fleeting, if at all.
- The proposed development is not anticipated to significantly impact Archaeological, Built Environment or Visual Heritage Resources.



2.4.2. Paleontological Impact Assessment (Appendix D)

- No fossil remains were recorded during the recent site visits (2014 and 2020) to the Mining Right Area.
- Given the general scarcity of fossil remains in the Kirkwood Formation and the high level of near surface chemical weathering here (e.g., Kaolinitisation), it is concluded that the proposed mining activities are unlikely to have a major impact on local fossil heritage resources.
- The impact significance of the mining development is accordingly assessed as Low (negative) before and after mitigation measures.
- In the case of any significant fossil finds exposed by mining operations in this region, mining operations must immediately stop, and Heritage Western Cape must be informed. This condition must be included in the Site-Specific Conditions.

2.4.3. Agricultural Compliance Statement (Appendix E9)

- The impact mitigation measures, monitoring and rehabilitation measures as recommended are included in Site Specific Conditions.

2.4.4. Terrestrial Animal Species Compliance Statement (Appendix E10)

- Three bird species of conservation concern are known to occur in the general area and habitat present onsite (cultivated grainlands with renosterveld patches), namely; Blue Crane, Denham's Bustard and Black Harrier.
- If the breeding pair is encountered, the mining should only proceed after the chick fledging. This condition is included in Site Specific Conditions.

2.4.5. Terrestrial Plant Species and Biodiversity Compliance Statement (Appendix E12 & E13)

- Sensitive environmental features that were identified on the property include natural and near natural indigenous vegetation remnants which exists throughout the property and consists of Critically Endangered – Eastern Ruens Shale Renosterveld and Endangered - Swellendam Silcrete Fynbos also identified as Terrestrial Critical Biodiversity Area and Ecological Support Areas.
- The expansion area falls within agricultural land currently used for annual crop cultivation and livestock grazing.
- The only plant SCC recorded within the cultivated agricultural lands in close proximity to expansion area is Milkwood Trees (a protected tree species).

Three individual Milkwood trees were recorded in the north-eastern cultivated agricultural land where mining activities are proposed, these trees must be demarcated and may not be impacted upon by any mining activity.

- With implementation of proper no-go area buffers and stormwater management measures it is not expected that the mining activities will have any significant impact. Buffer areas are included in Site Specific Conditions.

2.5. Public Participation Process complied with Chapter 6 of the EIA Regulations. The PPP included, *inter-alia*, the following (Annexure C):

- Newspaper advertisement announcing the commencement of the S&EIR process was placed in the local newspaper - **Suid-Kaap Forum** on **17th July 2020**.
- Visible site notices were placed at boundary of the property on **15th July 2020**.
- Written notifications were distributed by registered post to the landowner and direct neighbours on **20th July 2020**.
- Consultation with relevant SoEs (administering environmental functions);
- Proof of consultation with - and comments from - the Interested and Affected Parties are included in the EIAR/EMPr.
- Louwrens van Deventer Familie Trust provided consent (included in Annexure C).
- Comments and issues raised by Interested and Affected Parties were adequately addressed in the EIAR/EMPr.
- The register/list of interested and affected parties was opened and is included in the EIAR/EMPR.

2.6. Mine Health and Safety Inspectorate supports the application.

1 SCOPE OF AUTHORISATION

- 1.1** The holder of the EA must 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 deemed 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 as amended.
- 1.3** The activities, which are authorised, must only be carried out at the property indicated in the EA and the approved EMPr.
- 1.4** When any of the holders 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 the 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:
- 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 **Copy of the lodged appeal must be addressed to the Department of Mineral Resources on the address given on Page 2 of the EA.**
- 2.6 Provide the registered I&APs with:
 - 2.6.1 Name of the holder (entity) of this EA;
 - 2.6.2 Name of the responsible person for this EA;
 - 2.6.3 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) and any employee without PPE must not be allowed on site.
- 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 mining vehicles and machinery must be clearly marked and appropriate signaling must be posted to that effect. Furthermore, movement of vehicles and machinery must be restricted to the approved mining area.



- 3.4** Appropriate notification sign must be erected at the mining site, warning the public (residents, visitors etc.) about the hazard around the mining area and presence of mining vehicles and machinery.
- 3.5** Vegetation clearance must be limited to the actual mining footprint in accordance to the approved layout plan, and mitigation measures must be implemented to reduce the risk of erosion and alien species invasion.
- 3.6** Topsoil stripped before mining must be protected from erosion, contamination and/or pollution and stockpiling of topsoil must not take place in the drainage lines or areas where it will impede water runoff.
- 3.7** 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 designed for such waste 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.
- 3.8** An integrated waste management approach that is based on waste minimization (waste management hierarchy) must be implemented and must incorporate avoidance, reduction, recycling, treat, reuse and disposal where appropriate. Ensure that no refuse generated in the mining area is placed, buried, dumped or deposited on the adjacent properties or public places and open space.
- 3.9** Uncontaminated storm water must be prevented from coming into contact with the waste and must be diverted away from the storage site and mining area.
- 3.10** The waste generated during mining activities must be stored in animal proof containers and must be removed from site and disposed of at a registered disposal facility. Proof of disposal at a registered disposal facility must be kept and produced to any official of this Department on request.
- 3.11** In terms of sections 28 and 30 of NEMA, 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 holder of EA 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** Vehicles and machineries must be serviced and maintained in the manner whereby excessive smokes and noise production is reduced to acceptable levels, and to prevent oil leaks. Servicing of machinery and vehicles must not take place on site.
- 3.13** Residents (if any) on the property and surrounding areas must be informed of any unusual noise activities are planned in the mining area.
- 3.14** Dust suppression measures must be implemented on all exposed surface and access road to minimize and control airborne dust.
- 3.15** 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 **Heritage Western Cape (HWC)** (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 Heritage Western Cape (HWC).
- 3.16** Care must be taken to ensure that material and topsoil required for rehabilitation is free of contamination from hydrocarbons.
- 3.17** Refueling of machinery and construction vehicles must be done through a mobile bowser. Should any spills occur, it must be cleaned immediately by removing spillage together with the polluted soil and dispose it at authorised disposal site permitted for the disposal 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 ground water resources.
- 3.18** 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 wastewater treatment works. Proof of disposal must be kept on site and be produced upon request.



- 3.19** The holder of EA must ensure that any water uses listed in terms of Section 21 of National Water Act must get authorisation from Department of Water and Sanitation prior to the commencement of such activity (ies).
- 3.20** 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.
- 3.21** The holder of EA must ensure that rehabilitation of the disturbed areas caused by operation at all times comply with the approved EMPr.
- 3.22** 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.
- 3.23** The holder of EA must note that in terms of 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 license is issued in respect of that activity if license is required.
- 3.24** 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.
- 3.25** 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.
- 3.26** 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.
- 3.27** Subject to the commencement and duration requirements of the MPRDA and NEMA for the listed mining activities, the EA is valid for the period for which the aforesaid Mining Right is granted provided that this activity commences within 5 years. If the commencement of the proposed activities 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 must be made for the activity to be undertaken.



3.28 This EA will only be effective on the event that a corresponding Mining Right is issued in terms of MPRDA as amended and none of the activities listed in this EA may commence without a Mining Right

3.29 The listed activity (ies), including site preparation, must not commence within 30 (thirty) calendar days of the date of the notification of the decision being sent to the registered I&APs. This is inclusive of the 10 days condonation. 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.

3.30 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 activities 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 contents 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.

4.3 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.

4.4 The holder of the EA must prevent nuisance conditions or health hazards, or the potential creation of nuisance conditions or health hazards.

4.5 The holder of the EA must ensure that all non-recyclable waste are disposed of at a waste management facilities licensed to handle such wastes and all recyclable waste are collected by licensed waste management facilities for recycling, reuse or treatment.



- 4.6** In order to prevent nuisance conditions, the holder of the EA must ensure that all storage skips and bins are not overfilled. The holder of the EA must also make sure that littering of waste within the mining area is prohibited.
- 4.7** Non-compliance with any condition of this EA and the approved EMPr is an offence in terms of section 49A(1)(c) of NEMA and may result in criminal proceedings and issuing of a directive in terms of Section 28 and or a compliance notice in terms of section 31L of NEMA.
- 4.8** Only listed activity (ies) that are expressly specified in the EA must be undertaken, any additional or new activities not specified herein must be applied for by the holder and authorised by the competent authority 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 EA.
- 4.9** Rehabilitation of the disturbed surface caused by operation must comply with the approved EMPr.
- 4.10** The Holder of EA must appoint the ECO before commencement of mining activities and 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 readily available on site to ensure that activities at all times comply with the issued EA and approved EMPr.
- 4.11** The ECO must:
- 4.11.1** Keep and maintain a detailed incidents register (including any spillages of fuels, chemicals or any other material).
 - 4.11.2** 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.
 - 4.11.3** Keep records relating to monitoring and auditing on site and avail them for inspection to any relevant authorised officials.
 - 4.11.4** Keep copies of all environmental reports submitted to the Department.



- 4.11.5** Keep the records of all permits, licences and authorisations required by the operation.
 - 4.11.6** Compile a monthly monitoring report and make it available to the Department if requested.
 - 4.11.7** The duties and responsibility of the ECO must not be seen as exempting the holder of the EA from the legal obligations in terms of the NEMA.
- 4.12** The footprint of the activities must be limited on the areas authorised for the actual mining works and operational activities and all areas outside of the footprint must be regarded as a “no go” areas.
- 4.13** Any sand and/or gravel leaving the mine area must be fully covered with a tarpaulin cloth while been transported.

5 REPORTING TO THE DEPARTMENT

5.1 The holder of EA must:

- 5.1.1** Submit an Environmental Audit Report to this Department biennially and such report must be done by qualified independent Environmental Assessment Practitioner and the audit report must specify whether conditions of this environmental authorisation and EMPr/closure plan are adhered to;
- 5.1.2** The audit report must be in accordance to appendix 7 of the 2014 EIA regulations as amended;
- 5.1.3** identify and assess any new impacts and risks as a result of undertaking the activities, if applicable;
- 5.1.4** identify shortcomings in the EMPr/closure plan, if applicable;
- 5.1.5** identify the need, if any, for any changes to the management, avoidance and mitigation measures provided for in the EMPr;
- 5.1.6** if applicable, specify that the corrective action/s taken for the previous audit's non-conformities, was adequate and must;
- 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 EMP/closure plan in order to rectify any shortcomings identified with the aforementioned audit report.
- 5.3** 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.
- 5.4** The holder of the EA must, within 24 hours of any 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.
- 5.5** 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 5.4, 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 –
- 5.5.1** Correct the impact resulting from the incident;
 - 5.5.2** Prevent the incident from causing any further impact; and
 - 5.5.3** Prevent a recurrence of a similar incident.
 - 5.5.4** In the event that measures have not been implemented within 21 days of the incident referred to in condition 5.4, 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 to the site to reasonably prevent unauthorised entry. Signs indicating the risks involved in unauthorised entry must be displayed at the entrance.
- 6.2** The mining area must be fenced off and lockable gates must be installed to restrict unauthorised access to the site.

- 6.3** Weatherproof, durable and legible notices in at least three official languages applicable in the area must be displayed at the 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 draft, maintain and implement an emergency preparedness plan and review it annually when conducting audit and after each emergency and or major accident. The plan must, amongst others, include:

- 7.1.1** Site Fire
- 7.1.2** 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 center 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 and air quality, 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 and/or degradation, 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.

8.5 The holder of the EA must comply with Section 28 of the NEMA and conduct mining activities in an environmentally friendly manner.

9 COMMISSIONING AND DECOMMISSIONING

9.1 The commissioning and decommissioning of individual activity within the overall listed mining activities must take place within the phases and timeframes as set out in 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 but, only indigenous plants must 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, 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 and Energy 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.

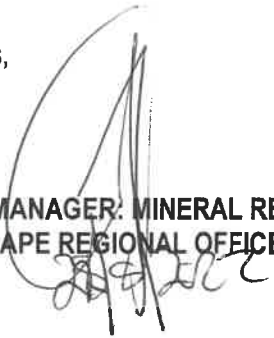


13 RECOMMENDATIONS

In view of the above, the NEMA principles, compliance with the conditions stipulated in this *EA*, and compliance with the EMP/closure plan, the competent authority is satisfied that the proposed listed activities 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 activities 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
WESTERN CAPE REGIONAL OFFICE
DATE: