

**DEA SCREENING TOOL REPORT
AND SITE SENSITIVITY VERIFICATION REPORT
FOR
PROPOSED BENTONITE AND ZEOLITE
MINING AMENDMENT APPLICATION ON
FARM UITSPANSKRAAL RE/585 MINERAL AREA 2
HEIDELBERG, WESTERN CAPE
MR Ref: WC30/5/1/2/2/157
Renewed under reference WC30/5/1/2/2/10124MR**

ORIGINALLY COMPILED APRIL 2025

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1. INTRODUCTION

1.1 Terms of Reference

The “Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (“NEMA”), when applying for Environmental Authorisation” (“the Protocols”) (Government Notice No. 320 as published in Government Gazette No. 43110 on 20 March 2020) came into effect on 9 May 2020.

This report is compiled in accordance with Section 1 Site Sensitivity Verification and Minimum Report Content Requirements:

Prior to beginning the assessment, the current use of the land and the potential environmental sensitivity of the site as identified by the national web based environmental screening tool must be confirmed by undertaking a site sensitivity verification.

The site sensitivity verification must be undertaken by an environmental assessment practitioner or a registered specialist.

The site sensitivity verification must be undertaken through the use of:

- (a) a desk top analysis, using satellite imagery;
- (b) a preliminary on-site inspection to identify; and
- (c) any other available and relevant information.

The outcome of the Site Sensitivity Verification must be recorded in the form of a report that:

- (a) confirms or disputes the current use of the land and environmental sensitivity as identified by the screening tool, such as new developments or infrastructure, the change in vegetation cover or status etc.;
- (b) contains a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity; and
- (c) is submitted together with the relevant report prepared in accordance with the requirement of the Environmental Impact Assessment Regulations.

1.2 Conditions Relating to this Report

The findings, results, observations, conclusions and recommendations given in this report are based on the author’s best scientific and professional knowledge as well as available information and knowledge of the area.

This report may not be altered or added to without the prior written consent of the author. This restraint also refers to electronic copies of this report which are supplied as sub portion of other reports, including main reports. Similarly, any recommendations, statements, or conclusions drawn from or based on this report must specifically refer to this report. If such comments form part of a main report for this investigation, the report must be included in its entirety as an appendix or separate section to the main report.

1.3 Site Sensitivity Verification Methods Used

The EAP made use of the following verification methods to compile the site sensitivity report:

- a desk top analysis using (amongst others) Google Earth, Cape Farm Mapper and BGIS; a site inspection conducted on 28 November 2024;
- taking into account all information as provided by the proposed developer.

2. SITE SENSITIVITY FINDINGS OF THE DEA ENVIRONMENTAL SCREENING REPORT

The table below indicates the relevant environmental sensitivities that have been identified by the DEA Environmental Screening Tool and associated level of each environmental sensitivity allocated to each theme.

Table 1: Environmental Sensitivities Identified and Associated Level Thereof allocated by DEA Screening Tool

| THEME | LEVEL OF SENSITIVITY |
|--------------------------------------|----------------------|
| Agriculture | Very High |
| Animal Species | Medium |
| Aquatic Biodiversity | Low |
| Archaeological and Cultural Heritage | Low |
| Civil Aviation | Low |
| Defence | Low |
| Palaeontology | Very High |
| Plant Species | Low |
| Terrestrial Biodiversity | Very High |

3. EAP SITE SENSITIVITY VERIFICATION FINDINGS AND EVIDENCE

Proposed Project Description:

Imerys Refractory Minerals South Africa (Pty) Ltd t/a Cape Bentonite Mine is an existing Bentonite and Zeolite mining company operating under an existing mining right on Mineral Area 2 (A Portion of Mineral Area 1) on the Remaining Extent of Farm Uitspanskraal No 585, Heidelberg (WC)30/5/1/2/2/157 originally issued on 03/03/2009 and renewed under reference WC30/5/1/2/2/10124MR on 17/11/2021.

Cape Bentonite Mine proposes to amend the approved quarries 3-6 and add two additional quarries within the approved mining right area on Farm Uitspanskraal RE/585. A total of 2.2ha has already been mined and rehabilitated since 2013 and is being used for ongoing annual cultivation by the landowner as per closure objectives.

Authorised mining right quarries currently being mined:

- Quarry/phase 1 – 1.6ha
- Quarry/phase 2 – 1.35ha

Authorised mining right quarries still to be mined and amended:

- Quarry/phase 3 – 0.86ha
- Quarry/phase 4 – 0.21ha
- Quarry/phase 5 – 0.34ha
- Quarry/phase 6 – 0.2ha

Additional quarries proposed within authorised mining right area:

- Quarry/phase 7 – 0.62ha
- Quarry/phase 8 – 0.41ha

The current total approved mining activities area is ±36.7ha to remain as is, which includes all activities associated with the proposed bentonite mining such as any explorations required, site establishment, demarcations, excavations, any vehicular movements, access and internal roads, topsoil and overburden storage, implementation of rehabilitation measures etc.

Mining Method

Mining is conducted 'in-house' by means of excavators, front-end loaders and 15-ton dumper trucks. The mining method comprises of relatively opencast quarrying. The topsoil and the overburden are removed and stockpiled separately along the perimeter of the quarry. As and when the bentonite is being mined, it is trucked to the Processing Plant at the head offices on Erf 1412, Heidelberg.

Overburden is mined in 20m wide and 3-4m thick benches to expose 3m of bentonite down-dip to be mined. This process is repeated until all bentonite is mined out. Through this process the quarry's depth will be a maximum of 30m deep, and no more than half of the quarry size will be open at a time.

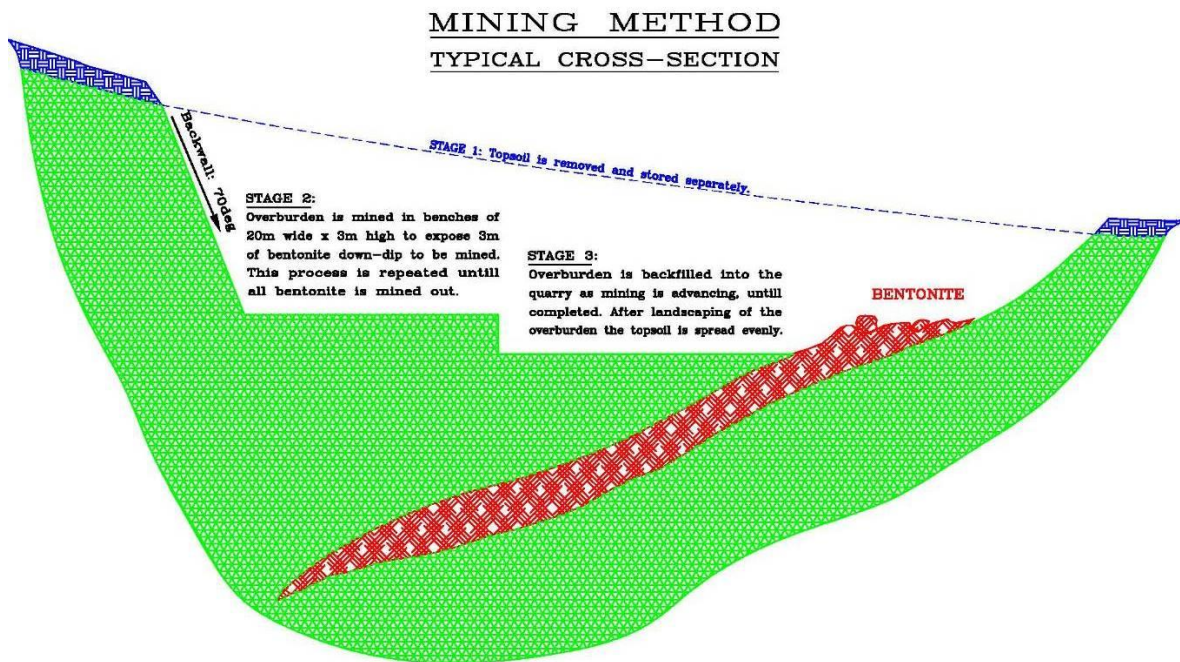
Rehabilitation takes place on an ongoing basis as mining proceeds. As the quarry advances along strike, the overburden is progressively replaced to backfill the excavation. The backfilled area is then contoured to prevent erosion, which could be caused by rain and surface water flow. Finally the topsoil is then spread over the disturbed surface area to restore the land to its previous state.

The bentonite found on the mining area is emplaced as relatively thin seams of 1-4m thick. The topsoil is normally less than 30cm thick. Overburden consists of a sequence of siltstone with conglomerate lenses; the latter also form the footwall of the succession.

Mining Phases:

- **Phase 1** entails the removal and stockpiling of top soil and overburden material for later rehabilitation purposes. Topsoil and overburden materials are removed and stockpiled separately adjacent to the proposed mining area on already ploughed and cultivated land and protected from potential erosion.
- **Phase 2** entails mining the bentonite and zeolite materials.
- **Phase 3** entails the rehabilitation of the area mined (which also takes place while active mining is in progress).

Also refer to mining method illustration below:



Natural Environmental Features of the Site:

The farm is characterised by its undulating landscape with associated steep slopes, drainage lines and gorges which limits the extent of cultivation to moderate slopes and flat lying areas.

Secondary non-perennial drainage lines are present throughout the relevant property along steep slopes and gorges due to the undulating nature of the landscape. Man-made gravel dams are also present within the drainage line areas. The only surface water run-off that is occasionally present in the drainage lines is storm water runoff during heavy rains. There are no remaining untransformed drainage lines on the proposed mining areas which falls within the annually cultivated agricultural land. Runoff from the drainage lines on the property mainly runs from west to east into the non-perennial Doring Rivier which runs along the eastern border of the property and the Doring Rivier tributary eventually feeds into the Duiwenhoks River east of Heidelberg.

Soil and Geology: Prisma-cutanic and/or pedocutanic diagnostic horizons dominant, B horizons mainly not red. The Heidelberg/Riversdale area is dominated by the Enon Conglomerate formation of the Bokkeveld Group. The Bokkeveld Group consists of sandstone, shale, siltstone and mudstone. The Enon Conglomerate consists of large boulders of Cape Sandstone originally in a matrix with lenses of mudstone and siltstone. Bentonite occurs as three main horizons in the area, each horizon comprising several layers in the Kirkwood Formation, overlain by conglomerate and sandstone of the Buffelskloof Formation. The Grahamstone Formation silcrete occurs at the top of the sequence in some places, whereas the Enon conglomerate forms the floor.

The study area lies within the East Coast Renosterveld bioregion (Mucina & Rutherford 2006). This bioregion has a moderately distinct flora, and high numbers of plant Species of Conservation Concern, with the main pressures being extensive habitat loss, due mainly to agriculture, followed by alien invasive vegetation, quarrying and urbanisation, and habitat modification due to lack of appropriate fire regimes. The indigenous vegetation remnants remaining within the undeveloped natural areas adjacent to the existing and proposed mining areas is Critically Endangered - Eastern Ruens Shale Renosterveld. The remaining indigenous vegetation remnants in a moderate to good condition are located in-between the transformed cultivated areas, along the drainage line areas associated with steep slopes which are too steep for cultivation.

As per the 2023 Western Cape Biodiversity Spatial Plan (WCBSP) the current approved mining right quarries as located on existing annually cultivated land and proposed quarry amendments and additional two quarries as proposed falls outside of CBA or ESA areas.

All of the existing and proposed quarries as within approved mining right area are located on completely transformed cultivated agricultural lands and not within any remaining natural watercourses/wetlands or indigenous vegetation areas.

It is therefore not expected that the proposed mining of the annually cultivated lands as surveyed by the EAP will have any significant detrimental ecological or heritage impacts should mining activities be contained within the boundaries of the existing cultivated areas and rehabilitation of the site be conducted in a successful manner by restoring the area to cultivated agricultural land after mining completion and all mining related activities stay outside of the remaining indigenous vegetation areas except for where existing roads must be used crossing these areas.

Heritage Features of the Site:

No significant heritage resources are located on nor within close proximity to the site. And the proposed activities are therefore not expected to have any significant detrimental archaeological, palaeontological or visual/landscape impacts. A Notice of Intent to Develop was submitted to Heritage Western Cape whom confirmed no HIA studies required.

Agricultural Characteristics:

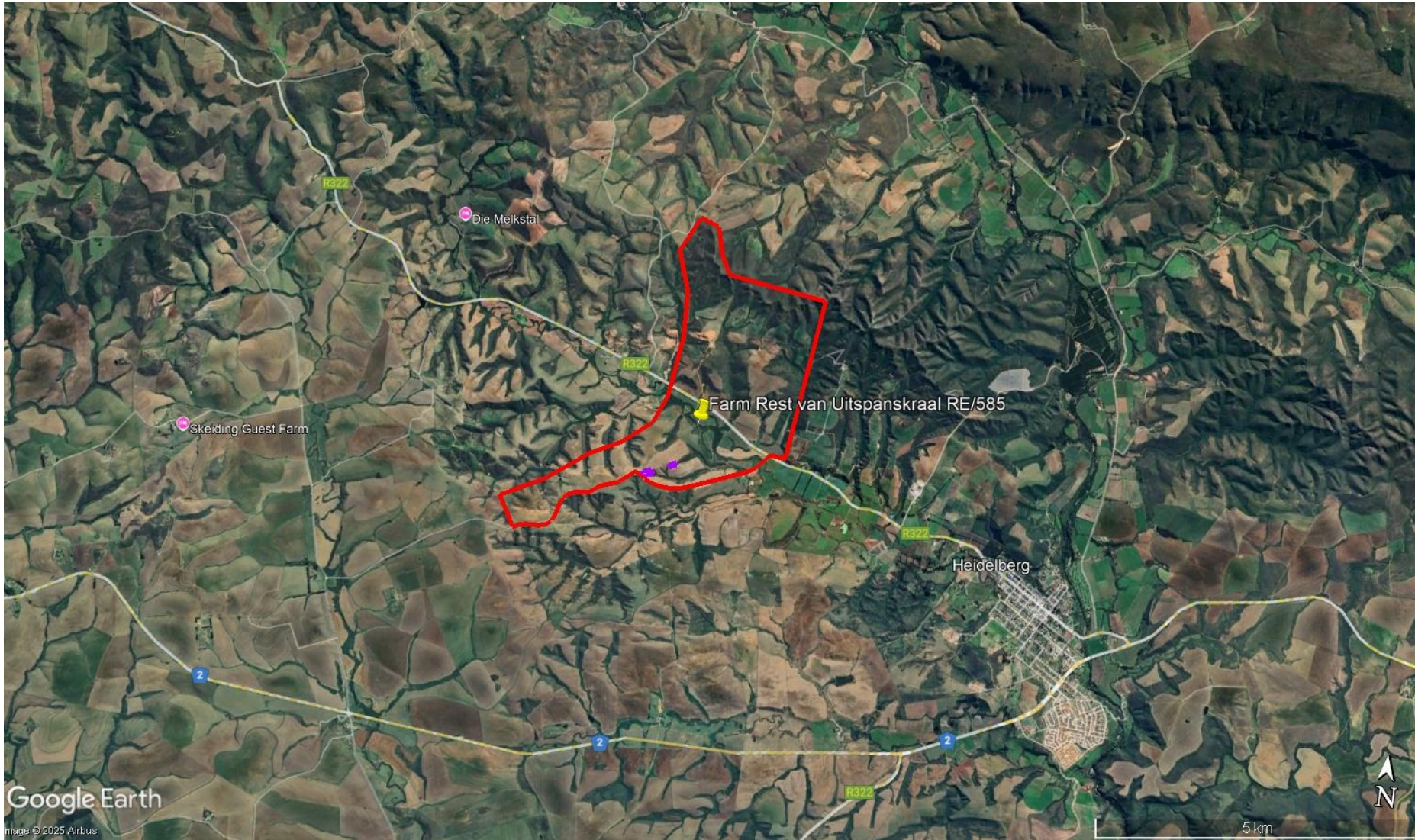
The proposed mining activities will have a temporary impact on annually cultivated land also used for livestock grazing when not under cultivation. The property is however 868.67Ha and mining as proposed in phases will only lead to an area of ±17ha of cultivated land which will temporarily not be available for cultivation during the mining operations until it has been rehabilitated, therefore most of the current agricultural operations will be able to continue as is throughout the mining activities taking place on site and proposed mining areas will only be temporarily unavailable for cultivation. All mined cultivated agricultural land is to be rehabilitated to its previous state to allow for continuation of cultivation after mining activities have been completed and mining will take place in phases allowing annual cultivation and livestock grazing of most of the property to continue as is throughout the mining lifecycle. It is therefore not expected that the proposed mining activities will have any significant detrimental agricultural impacts.

Socio-economic Characteristics:

The mine provides direct employment for at least 54 local persons and compensation to the landowner. The operation further creates indirect employment opportunities in equipment supply industries, transport and bentonite mining, and the mining environment.

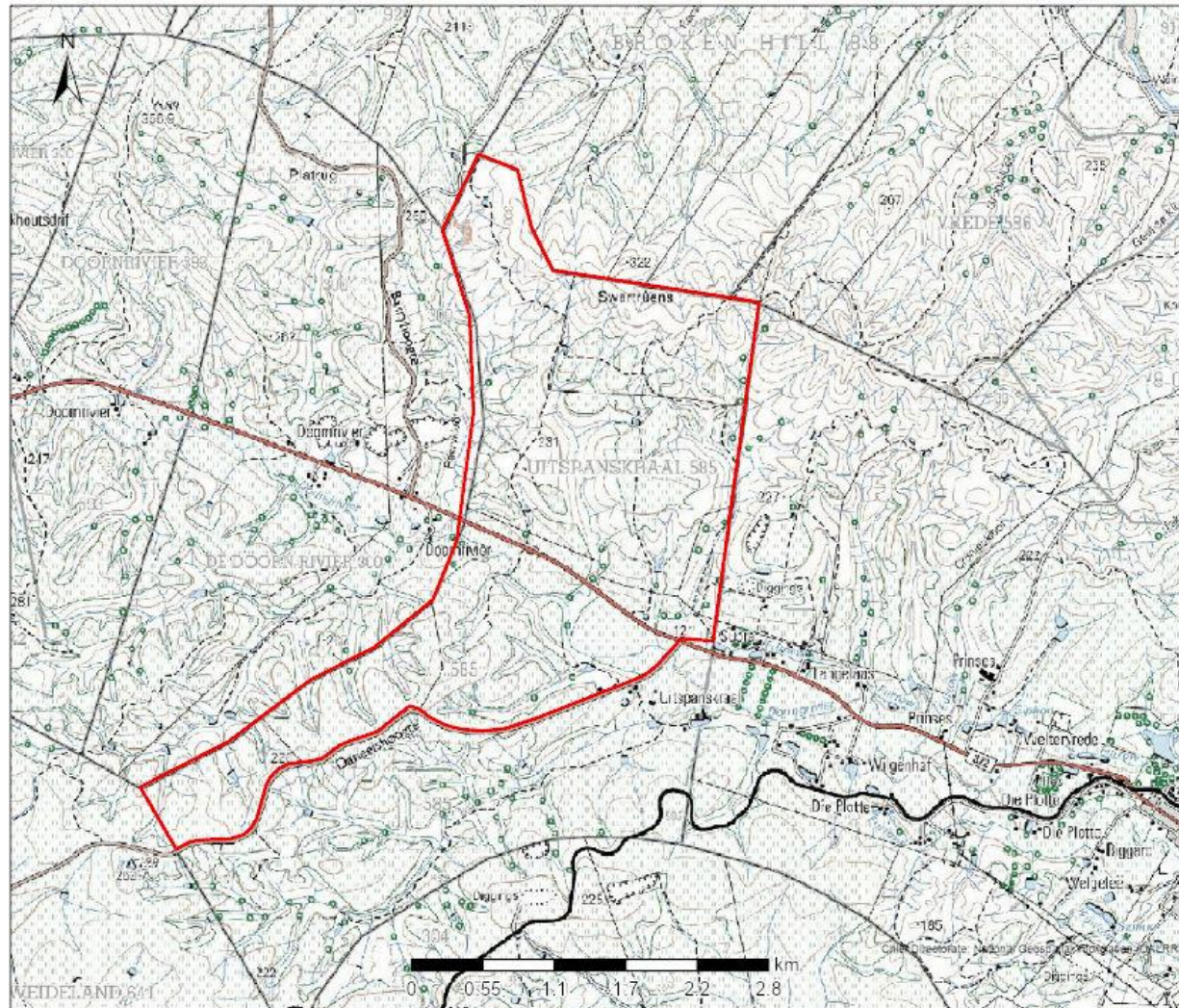


Map 1: Locality of Heidelberg in the Western Cape.



Map 2: Locality of Farm Rest van Uitspanskraal RE/585 near Heidelberg in the Western Cape.
GPS co-ordinate for “middle” of existing mining right site - 34° 04' 34.07”S
20° 53' 22.40”E

1:50 000 Topographical Map Farm Rest van Uitspanskraal RE/585



Legend

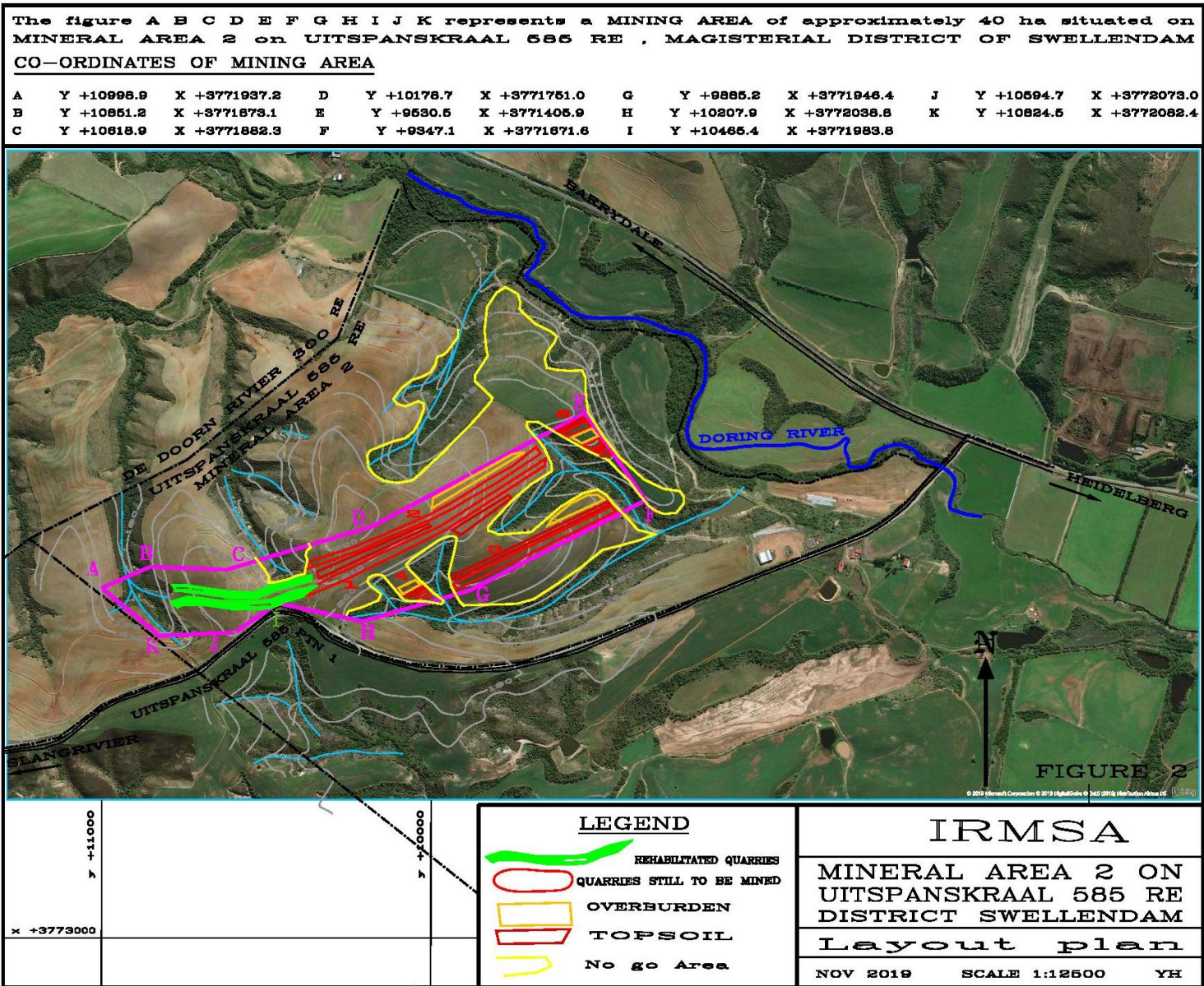
Map Center: Lon: 20°54'7.9"E
Lat: 34°3'50.8"S

Scale: 1:50,000

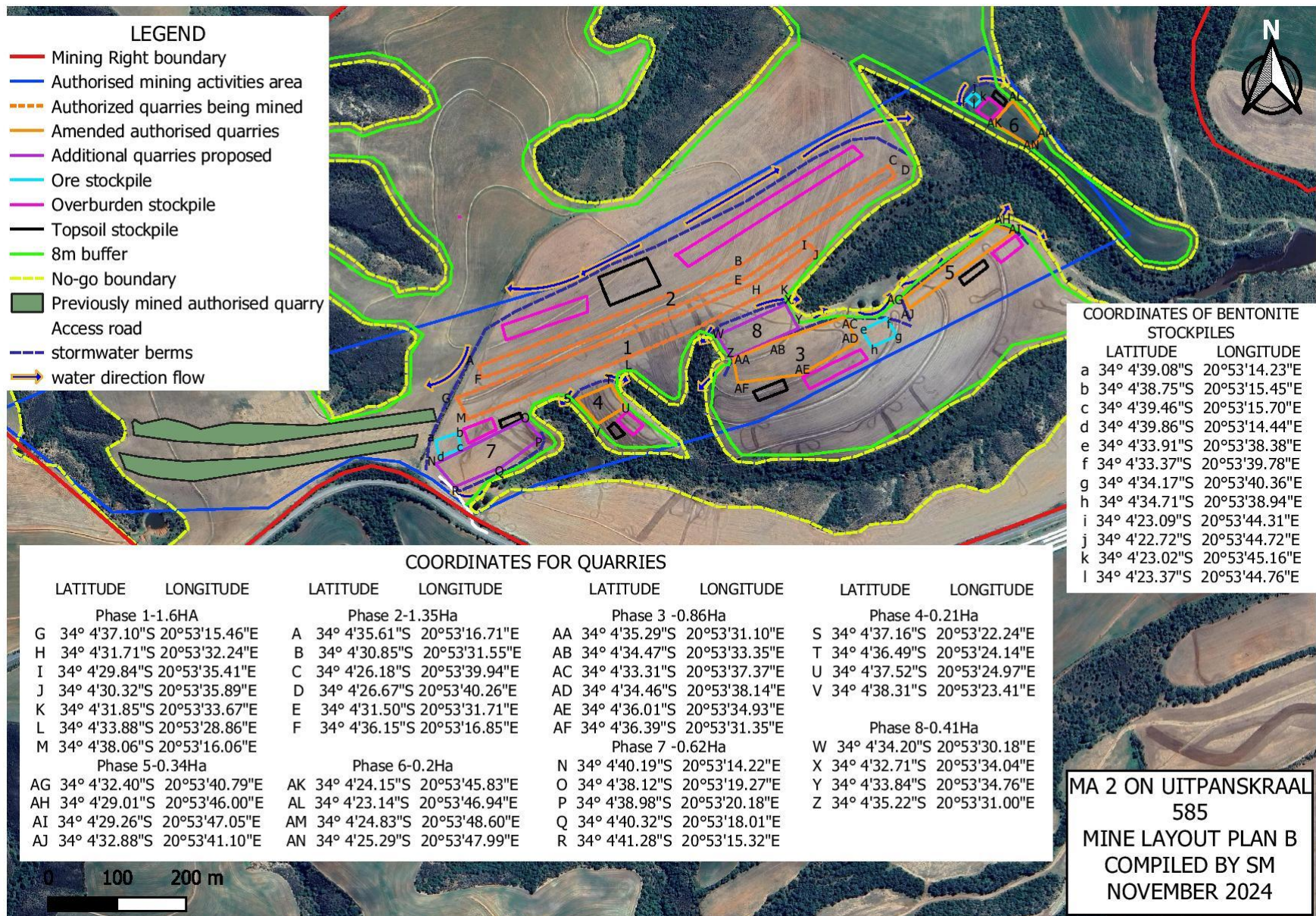
Date created: 2025/12/05



Map 3: The 1 in 50 000 topographical map for Farm Rest van Uitspanskraal RE/585 near Heidelberg in the Western Cape.



Map 4.1: Existing approved mining layout map for Farm Rest van Uitspanskraal RE/585



Map 4.2: Proposed amended mining layout map for Farm Rest van Uitpanskraal RE/585 indicating approved mining right area and proposed quarries amendments and two additional quarries within approved mining right area.

WCBSP 2023 CBA and ESA Map Uitspanskraal MR Amendments



Map 5: 2023 WCBSP land use map indicating mapped terrestrial and aquatic Critical Biodiversity Areas (“CBA”) and Ecological Support Areas (“ESA”) as according to Fine Scale Planning (“FSP”) for Hessequa in relation to the proposed mining activities amendment (orange) and additional areas (purple) as assessed for Farm Rest van Uitspanskraal RE/585 near Heidelberg in the Western Cape.

NFEPA Map Uitspanskraal MR Amendments



Map Center: Lon: 20°53'20.8"E
Lat: 34°4'28.4"S

Scale: 1:18,056

Date created: 2025/02/12



Map 6: NFEPA map for Hessequa in relation to the proposed mining activities amendment (orange) and additional areas (purple) as assessed for Farm Rest van Uitspanskraal RE/585 near Heidelberg in the Western Cape.



Site Photo 1: Phase 8 additional quarry proposed within approved mining right area on transformed cultivated land of Farm Rest van Uitspanskraal RE/585.



Site Photo 2: Phase 7 additional quarry proposed within approved mining right area on transformed cultivated land of Farm Rest van Uitspanskraal RE/585.

Table 2: EAP and/or Specialist Findings that either Confirms or Disputes the Environmental Sensitivity as Identified by the DEA Screening Tool

| THEME | EAP AND/OR SPECIALIST RECOMMENDED LEVEL OF SENSITIVITY | MOTIVATION | EVIDENCE |
|----------------------|--|---|---|
| Agriculture | High | The screening tool classifies the assessed footprint as being entirely very high agricultural sensitivity. The very high sensitivity classification by the screening tool is due to the PAA status of the site. The agricultural impact assessment disputes the very high agricultural sensitivity classification of the site by the screening tool and verifies the entire site as being of high agricultural sensitivity because of its assessed cropping potential. | Agricultural Impact Assessment conducted |
| Animal Species | Medium to Low | The quarry amendments and additional quarry areas as proposed are located on annually cultivated agricultural land and within an existing mining right area already previously assessed for potential environmental impacts and with already ongoing mining activities taking place on site. Most of the property is annually cultivated and therefore it is not expected to be a permanent habitat to animal species of conservation concern. However, due to remaining indigenous remnants throughout the property indigenous animal species may be impacted upon by the proposed mining activities therefore an Animal Species Impact Statement is proposed. | Refer to maps, site photos and project description. |
| Aquatic Biodiversity | Low (Agree with DEA Screening Tool Report finding) | Aquatic features of the site are limited to non-perennial drainage lines and man-made dams as found in the gorges/"klowe" of the property too steep to plough for cultivation, only flowing during heavy rains. Mining activities are proposed on annually cultivated agricultural land. No drainage lines that have not been completely transformed | Refer to maps, site photos and project description. |

| | | | |
|--------------------------------------|--|--|--|
| | | by agricultural cultivation remains on the proposed mining areas. Aquatic impact statement is proposed. | |
| Archaeological and Cultural Heritage | Low (Agree with DEA Screening Tool Report finding) | There are no significant archaeological or cultural features expected to be found on the site or surrounds that will be impacted upon. | A notice of intent to develop completed and submitted to Heritage Western Cape whom confirmed no HIA required. |
| Civil Aviation Theme | Low (Agree with DEA Screening Tool Report finding) | - | - |
| Defence | Low (Agree with DEA Screening Tool Report finding) | - | - |
| Palaeontology | Low | There are no significant palaeontological features expected to be found on the site or surrounds that will be impacted upon. | A notice of intent to develop completed and submitted to Heritage Western Cape whom confirmed no HIA required. |
| Plant Species | Low (Agree with DEA Screening Tool Report finding) | The proposed mining areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or habitat will be disturbed during the proposed mining activities. Plant impact statement to be conducted. | Refer to maps, site photos and project description. |
| Terrestrial Biodiversity | Low | The proposed mining activities areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or natural animal habitat will be disturbed during the proposed mining activities and mining activities has already been assessed and approved within the proposed area and has taken place and is currently taking place within approved mining right areas. A Terrestrial impact statement is proposed. | Refer to maps, site photos and project description. |

4. SPECIALIST ASSESSMENTS REQUIRED VERIFICATION FINDINGS

Table 3: The table below indicates the specialist assessments identified by the screening report and reasons/motivation for the specialist assessment to be conducted or not to be conducted

| Specialist Report Identified | Reason/s for the Assessment to be Conducted or Not to be Conducted (as provided by the EAP and/or specialist) |
|-------------------------------------|--|
| 1. Agricultural Impact Assessment | The screening tool classifies the assessed footprint as being entirely very high agricultural |

| | |
|---|---|
| | <p>sensitivity. The very high sensitivity classification by the screening tool is due to the PAA status of the site. This assessment disputes the very high agricultural sensitivity classification of the site by the screening tool and verifies the entire site as being of high agricultural sensitivity because of its assessed cropping potential.</p> <p>The focus of an agricultural assessment for mining is to determine whether or not the proposed mining will cause a significant, long-term reduction in agricultural production potential. A reduction in agricultural production potential results from the integrated effect of a number of different mechanisms, the most important of which, on this site, is loss of topsoil.</p> |
| 2. Landscape/Visual Impact Assessment | <p>Not required.</p> <ul style="list-style-type: none"> • All bentonite and zeolite mining activities are proposed on annually cultivated and ploughed agricultural lands. No undisturbed or rehabilitating land is to be impacted upon by the proposed mining activities therefore no pristine landscapes will be visually disturbed. • Mining activities proposed within existing approved mining right area adjacent to areas where mining activities is currently already taking place to be rehabilitated to cultivated land once mining is completed. • The proposed mining activities are temporary, takes place in phases and rehabilitation of the site to previous cultivated agricultural land happens immediately after mining is completed returning it to its previous visual state. The mining is also conducted in phases so mining of all proposed phases will not all happen simultaneously. |
| 3. Archaeological and Cultural Heritage Impact Assessment | A notice of intent to develop completed and submitted to Heritage Western Cape whom confirmed no HIA required. |
| 4. Palaeontological Impact Assessment | A notice of intent to develop completed and submitted to Heritage Western Cape whom confirmed no HIA required. |
| 5. Terrestrial Biodiversity Impact Assessment | The proposed mining activities areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or natural animal habitat will be disturbed during the proposed mining activities and mining activities has already been assessed and approved within the proposed area and has taken place and is currently taking place within |

| | |
|---|--|
| | approved mining right areas. A Terrestrial impact statement is proposed. |
| 6. Aquatic Biodiversity Impact Assessment | Aquatic features of the site are limited to non-perennial drainage lines and man-made dams as found in the gorges/"klowe" of the property too steep to plough for cultivation, only flowing during heavy rains. Mining activities are proposed on annually cultivated agricultural land. No drainage lines that have not been completely transformed by agricultural cultivation remains on the proposed mining areas. Aquatic impact statement is proposed. |
| 7. Hydrology Assessment | Not required – Existing mining activities already on site. Mining activities are not proposed on any significant hydrological features i.e. within drainage lines or watercourses and stormwater are to be managed in accordance with stormwater management plan and environmental management programme. Stormwater will be directed to flow into its existing flow paths around the mining areas so as not to have any detrimental impacts on the hydrology of the site and surrounds. Aquatic Compliance Statement to be provided. |
| 8. Noise Impact Assessment | Not required – No activities that will generate noise levels above the legal limit for rural areas in terms of the Environmental Conservation Act, Western Cape Noise regulations will be conducted. |
| 9. Radioactivity Impact Assessment | Not required – there is no radioactive resources on the property nor within close proximity to the property that will be impacted upon by the proposed prospecting activities. |
| 10. Traffic Impact Assessment | Not required – traffic impacts are expected to be the same as per current mining operations already taking place on the site and will only be temporary. |
| 11. Geotechnical Assessment | Not required – it has already been determined through previous and ongoing mining operations taking place on the site that the bentonite and zeolite resources are present. |
| 12. Climate Impact Assessment | Not required – the proposed additional quarries within the already approved mining right area on cultivated agricultural lands is not to such a scale that it is expected to have any climate impacts. |
| 13. Health Impact Assessment | Not required- to date there has been no indication that the ongoing mining activities has had any detrimental health impacts and proposed amendments, and additional quarries is not |

| | |
|---|---|
| | expected to lead to any significant health impacts. |
| 14. Socio-economic Assessment | Not required – landowners consent has already been obtained for mining activities as proposed and proposed amendments and additional quarries within an existing mining right area is just a continuation of the ongoing mining activities hence it is not expected to lead to any significant socio-economic impacts. |
| 15. Ambient Air Quality Impact Assessment | Not required – the proposed additional quarries within the already approved mining right area on cultivated agricultural lands is not proposed at such a scale that it is expected to have any ambient air quality impacts. |
| 16. Seismicity Assessment | Not required –current and proposed mining activities not expected to have any impacts on the frequency or distribution of earthquakes likely to take place within the area as this is also not an area known for active seismic activities. |
| 17. Plant Species Assessment | The proposed mining areas are to be restricted to completely transformed cultivated land therefore no indigenous vegetation or habitat will be disturbed during the proposed mining activities; a Plant Species Impact Statement is proposed. |
| 18. Animal Species Assessment | The quarry amendments and additional quarry areas as proposed are located on annually cultivated agricultural land and within an existing mining right area already previously assessed for potential environmental impacts and with already ongoing mining activities taking place on site. Most of the property is annually cultivated and therefore it is not expected to be a permanent habitat to animal species of conservation concern. However, due to remaining indigenous remnants throughout the property indigenous animal species may be impacted upon by the proposed mining activities therefore an Animal Species Impact Statement is proposed. |

5. DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (“EAP”)

I **Johmandie Pienaar**, as the appointed EAP hereby declare/affirm the correctness of the information provided or to be provided as part of the report, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - ~~○ am not independent, but another specialist (the “Review Specialist”) that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);~~
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification.
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



Signature of the EAP:

28 November 2025

Date:

Enviro-EAP (Pty) Ltd

Name of company (if applicable):

APPENDIX A: DEA ENVIRONMENTAL SENSITIVITY SCREENING REPORT

SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

EIA Reference number: -

Project name: 157MR Amendment Application

Project title: -

Date screening report generated: 04/04/2025 11:48:57

Applicant: Imerys Refractory Minerals SA

Compiler: Johmandie Pienaar - Enviro-EAP

Compiler signature:
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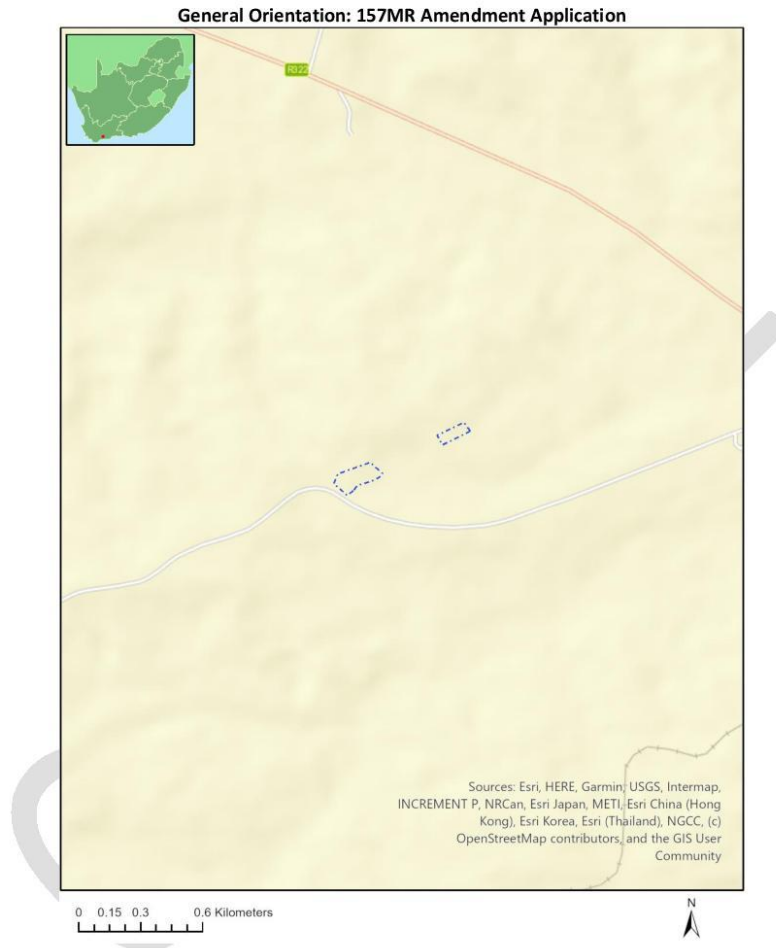
Application Category: Mining|Mining Right

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Proposed Project Location

Orientation map 1: General location



Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

Mining | Mining Right.

Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

| Incentive, restriction or prohibition | Implication |
|---|---|
| Strategic Gas Pipeline Corridors-Phase 1a & 1b: Saldanha to Ankerlig and Saldanha to Mossel Bay | https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf |

Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

| Theme | Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|--|-----------------------|------------------|--------------------|-----------------|
| Agriculture Theme | X | | | |
| Animal Species Theme | | | X | |
| Aquatic Biodiversity Theme | | | | X |
| Archaeological and Cultural Heritage Theme | | | | X |
| Civil Aviation Theme | | | | X |
| Defence Theme | | | | X |
| Paleontology Theme | X | | | |
| Plant Species Theme | | | | X |
| Terrestrial Biodiversity Theme | X | | | |

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the

assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

| No | Specialist assessment | Assessment Protocol |
|----|--|---|
| 1 | Agricultural Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Agriculture Assessment Protocols.pdf |
| 2 | Landscape/Visual Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 3 | Archaeological and Cultural Heritage Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 4 | Palaeontology Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 5 | Terrestrial Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Terrestrial Biodiversity Assessment Protocols.pdf |
| 6 | Aquatic Biodiversity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf |
| 7 | Hydrology Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 8 | Noise Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Noise Impacts Assessment Protocol.pdf |
| 9 | Radioactivity Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 10 | Traffic Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 11 | Geotechnical Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 12 | Climate Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 13 | Health Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 14 | Socio-Economic Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 15 | Ambient Air Quality Impact Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |

| | | |
|----|---------------------------|---|
| 16 | Seismicity Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf |
| 17 | Plant Species Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf |
| 18 | Animal Species Assessment | https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf |

OFFICIAL

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



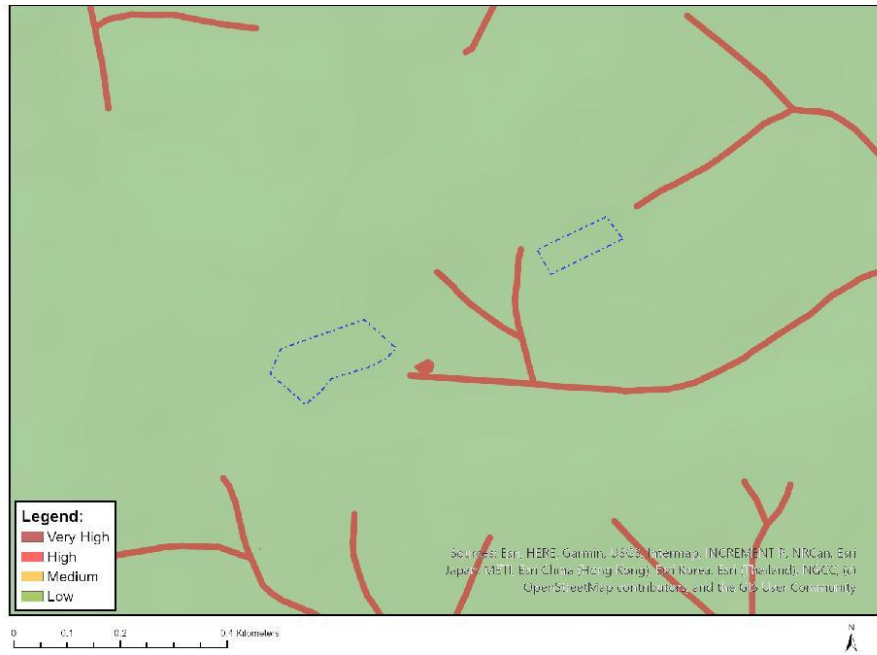
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at ejadatarerequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | X | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|------------------------------------|
| Medium | Invertebrate-Aneuryphymus montanus |

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-----------------|
| Low | Low sensitivity |

MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

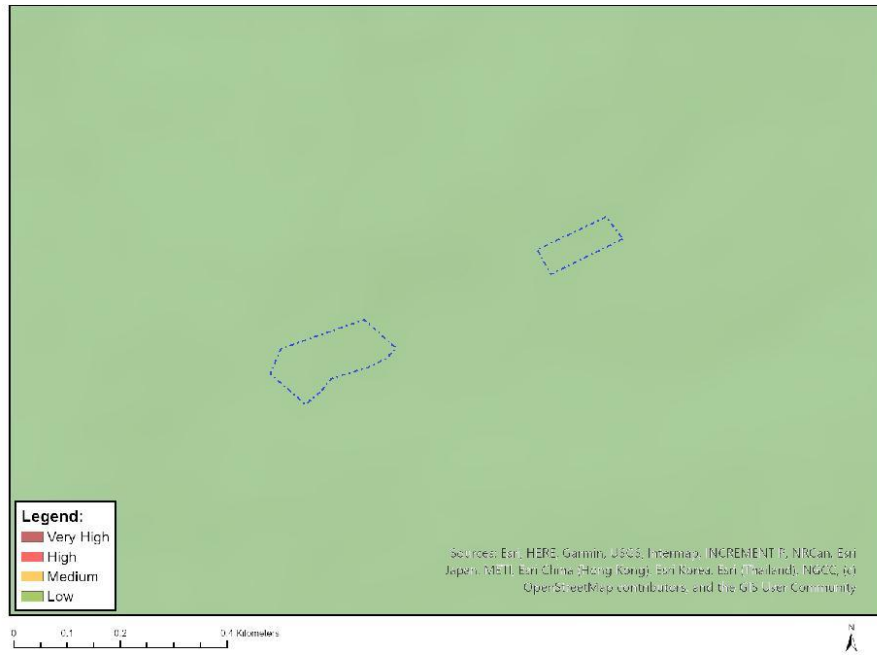


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-----------------|
| Low | Low sensitivity |

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

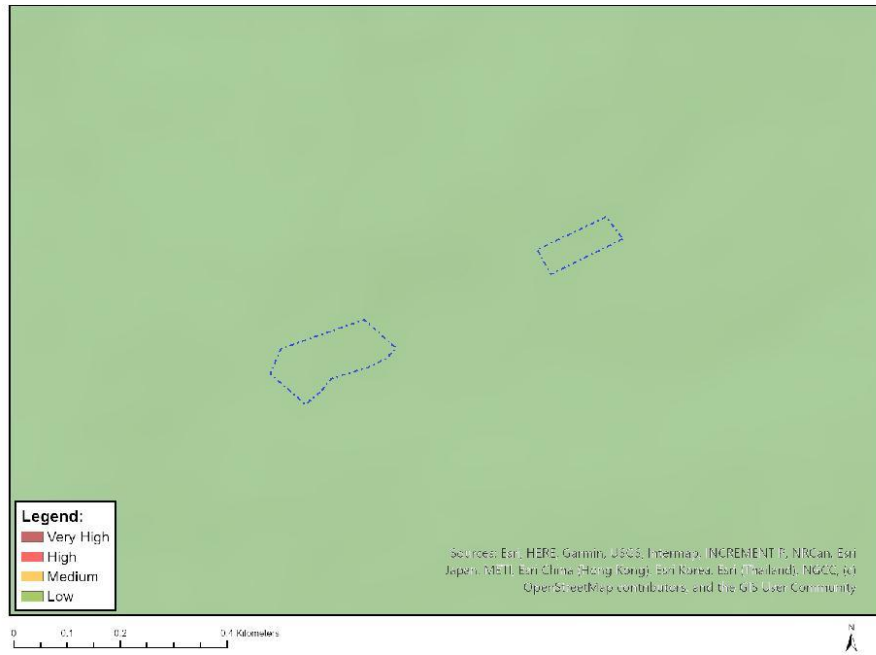


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-----------------|
| Low | Low sensitivity |

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

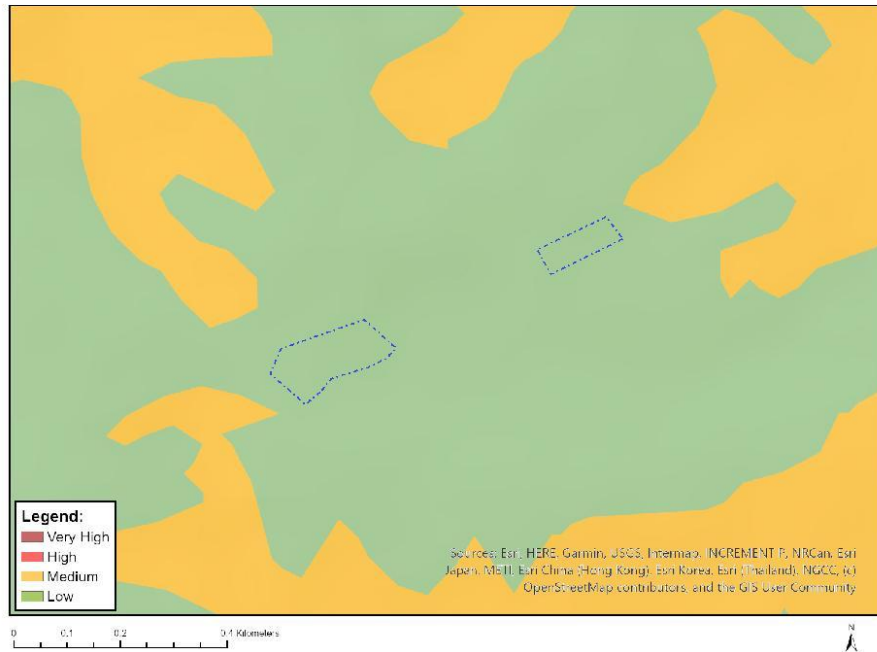


| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-----------------|
| Low | Low Sensitivity |

MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at ejadatarerequests@sanbi.org.za listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| | | | X |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-----------------|
| Low | Low Sensitivity |

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



| Very High sensitivity | High sensitivity | Medium sensitivity | Low sensitivity |
|-----------------------|------------------|--------------------|-----------------|
| X | | | |

Sensitivity Features:

| Sensitivity | Feature(s) |
|-------------|-------------------------------------|
| Very High | ESA 2: Restore from other land use |
| Very High | CBA 2: Terrestrial |
| Very High | CBA 1: Terrestrial |
| Very High | EN_Eastern Ruens Shale Renosterveld |