



mineral resources

Department:
Mineral Resources
REPUBLIC OF SOUTH AFRICA

1

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

IMPORTANT NOTICE

Kindly note that:

1. As from 8 December 2014, this document serves as the application form, and incorporates the requisite documents that are to be submitted together with the application for the necessary environmental authorisations in terms of the said Acts.
2. This application form is applicable while the Mineral and Petroleum Resources Development Amendment Act of 2008 is in effect, as the form may require amendment should the Act be further amended.
3. Applicants are required to apply for the necessary water use licence and any other authorisations or licences to the relevant competent authorities as required by the relevant legislation. Upon acceptance of an application for a right or permit in terms of the MPRDA, applicants will be required to provide evidence to the Regional Manager that a water use licence has been applied for.
4. The Regional Manager will respond to the application and provide the reference and correspondence details of the Competent Authority, and in the event that the application for a right or permit is accepted, together with the date by which the relevant environmental reports must be submitted. Notwithstanding anything that may appear to be stated to the contrary in the acceptance letter, the timeframes are in fact aligned and the prescribed timeframes for the submission of documents as regulated by the NEMA regulations must be strictly adhered to.
5. The application must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. Spaces are provided in tabular format and will extend automatically when each space is filled with typing.
6. The failure to submit complete information as required in this application form may result in the refusal of the application for an environmental authorisation and consequently of the right or permit applied for.
7. This application must be submitted through the SAMRAD online application system of the Department of Mineral Resources under "Other documents to upload".
8. Unless protected by law, all information filled in on this application form will become public information on receipt by the competent authority. Any interested and affected party should and shall be provided with the information contained in this application on request, during any stage of the application process.
9. Please note that an application fee is payable in terms of the National Environmental Management Act and the National Waste Management Act, which fees must be paid upon lodgement of the application. Should the said application fees not be paid as prescribed the application for a right or permit in terms of the Mineral and Petroleum Resources Development Act cannot be considered to have been made in the prescribed manner and the said

application for a right or permit will have to be rejected. In this regard the type of applications must be identified in the table below.

PLEASE STATE TYPE OF AUTHORISATIONS BEING APPLIED FOR.

| APPLICATION TYPE | APPLICABLE FEE | Mark with an X where applicable |
|--|----------------|-------------------------------------|
| NEMA S&EIR application on its own | R10 000.00 | <input checked="" type="checkbox"/> |
| NEMA BAR application on its own | R 2 000.00 | <input type="checkbox"/> |
| NEMWA S&EIR application on its own | R10 000.00 | <input type="checkbox"/> |
| NEMWA BAR application on its own | R 2 000.00 | <input type="checkbox"/> |
| NEMA S&EIR application combined with NEMWA S&EIR application | R 15 000.00 | <input type="checkbox"/> |
| NEMA BAR application combined with NEMWA BAR application | R 3 000.00 | <input type="checkbox"/> |
| NEMA S&EIR application combined with NEMWA BAR application | R 11 000.00 | <input type="checkbox"/> |

1. CONSULTATION BASIC ASSESSMENT AND/OR SCOPING REPORT

This is an application for mine expansion requiring a NEMA S&EIR.

Mooiplaats Colliery has an existing Mining Right (MP 30/5/1/2/68MR). The mine has recently concluded a Section 102 Application in terms of the MPRDA to include the two prospecting right areas, known as Mooiplaats South, into the existing Mining Right. Mooiplaats Colliery would like to include two areas that were originally part of the Vunene Mining Right, into the Mooiplaats Colliery Mining Right.

Mooiplaats Colliery requires a new EA in terms of the EIA Regulations, 2014 (GN R. 982) as amended by GN 326 of 2017, promulgated under the NEMA, (hereafter referred to as EIA Regulations, as amended), to extend its mining activities to include the Vunene areas into the Mooiplaats Colliery Mining Right. As part of the application processes, the EMPR will be consolidated to include the existing Mooiplaats Colliery, the additional Mooiplaats South area and the new Vunene areas, in terms of Regulation 37 of the EIA Regulations, as amended and in terms of Section 102 of the MPRDA. Furthermore, an updated MWP, to include the additional Vunene areas, a Regulation 2.2 Plan and an updated SLP, will be submitted to the DMR in terms of Section 102 of the MPRDA.

Mining is a listed activity in terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) and specifically GNR 984 and, therefore, an environmental authorisation process will have to be undertaken. There will not be any additional surface infrastructure required (apart from rescue boreholes, two ventilation shafts) for the proposed project, and all Run of Mine (RoM) and waste will be dealt with at the existing Mooiplaats Colliery operations and facilities.

2. DETAILS OF THE APPLICANT

| | | | |
|---|--|-------|----|
| Project applicant: | Langcarel Rf (Pty) Ltd. | | |
| Registration no (if any): | 1975/002667 | | |
| Trading name (if any): | NA | | |
| Responsible Person, (e.g. Director, CEO, etc.): | Louis Loubser | | |
| Contact person: | As above | | |
| Physical address: | Portion 9 of the farm Mooiplaats 290 Ermelo N2 | | |
| Postal address: | 4 Sederberg Road Alrode South Gauteng | | |
| Postal code: | 1451 | Cell: | NA |
| Telephone: | 010 0038075 | Fax: | NA |
| E-mail: | louis.loubser@mooiplaatscoal.co.za | | |

3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION

| | | | |
|---|--|-------|-------------------|
| EAP: | Adri Joubert | | |
| Professional affiliation/registration: | SACNASP: 400336/11 | | |
| Contact person (if different from EAP): | Same as EAP | | |
| Company: | Geo Soil and Water (Pty) Ltd | | |
| Physical address: | 15A Midas Avenue, Olympus, Pretoria, 0081 | | |
| Postal address: | Postnet Suite C319, Private Bag X18, Lynnwood Ridge, 0040 | | |
| Postal code: | 0040 | Cell: | +27 (82) 926 8460 |
| Telephone: | +27 (82) 926 8460 | Fax: | - |
| E-mail: | adri@geosoilwater.co.za | | |

If an EAP has not been appointed please ensure that an independent EAP is appointed as stipulated by the NEMA Regulations, prior to the commencement of the process.

The declaration of independence and the Curriculum Vitae (indicating the experience with environmental impact assessment and relevant application processes) of the EAP must also be attached as **Appendix 1**.

4. PROJECT DESCRIPTION

| | |
|---|--|
| Farm Name: | The mining area consists of the following farm areas: <ul style="list-style-type: none"> - A portion of Portion 1, a portion of Portion 2, a portion of Portion 7, a portion of Portion 8 and Portion 9 of the Farm Mooiplaats No.290 IT; - Portion 2 and 3 and the remaining extent of the Farm Klipbank No.295 IT; and, - Portion 1 and Portion 2 and the remaining Extent of Farm Adrianople No.296 IT |
| Application area (Ha) | The Mooiplaats Colliery Mining Right Area covers 4823.9613 hectares. The footprint of the proposed underground mining activities will cover an area of approximately 825.45 hectares. |
| Magisterial district: | Ermelo, Gert Sibande District Municipality |
| Distance and direction from nearest town | Mooiplaats Colliery is situated approximately 18km south-east of, on the outskirts of the town Ermelo alongside the N2 national road to Piet Retief. The mine lies situated 2km south of the Camden Power station. |
| 21-digit Surveyor General Code for each farm portion | This environmental authorisation application covers the following farm portions: <ul style="list-style-type: none"> • T0IT00000000029000001 • T0IT00000000029000009 • T0IT00000000029000002 • T0IT00000000029000007 • T0IT00000000029000008 • T0IT00000000029500000 • T0IT00000000029500002 • T0IT00000000029500003 • T0IT00000000029600000 • T0IT00000000029500001 • T0IT00000000029500002 |
| Locality map | Please find Locality attached as Appendix 2 . |
| Description of the overall activity. (Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, | Mooiplaats Colliery has an existing Mining Right (MP 30/5/1/2/68MR). The mine has recently concluded a Section 102 Application in terms of the MPRDA to include the two prospecting right areas, known as Mooiplaats South, into the existing Mining Right. Mooiplaats Colliery would like to include two additional areas (underground mining) that were originally part of the Vunene Mining Right (separate MR), into the Mooiplaats Colliery Mining Right as well as apply for approvals in terms of NEMA for the future surface infrastructure associated with the Vunene areas as well as the previous Mooiplaats South area. |

| | |
|--|---|
| Reconnaissance permit, Technical co-operation permit, Additional listed activity) | <p>The mining method will be bord and pillar underground mining and making use of a continuous miner. The target mineral is coal. As the Mooiplaats Colliery Vunene Project will use the existing Mooiplaats Colliery infrastructure, minimal additional infrastructure will be required. Two additional ventilation shafts (up/down) will be required as well as various rescue boreholes and access roads.</p> <p>Mooiplaats Colliery requires a new EA in terms of the EIA Regulations, 2014 (GN R. 982), as amended by GN 326 of 2017, promulgated under the NEMA, to extend its mining activities to include the Vunene areas into the Mooiplaats Colliery Mining Right. As part of the application processes, the existing Mooiplaats Colliery/Mooiplaats South area EMPR will be consolidated to include the new Vunene areas and surface infrastructure (vent shafts, rescue boreholes and roads), in terms of Regulation 37 of the EIA Regulations, as amended and in terms of Section 102 of the MPRDA. Furthermore, an updated MWP, to include the additional Vunene areas, a Regulation 2.2 Plan and an updated SLP, will be submitted to the DMR in terms of Section 102 of the MPRDA.</p> <p>A water use licence application (WULA) process for the relevant water uses that will be triggered by the proposed project will also be undertaken in terms of the National Water Act (Act 36 of 1998) (NWA), while simultaneously amending the existing water use licence.</p> |
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5. ACTIVITIES TO BE AUTHORISED

(Please provide copies of Environmental Authorisations obtained for the same property as **Appendix 3**).

(For an application for authorisation indicated. Please note that for a project that involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be included. Please note that any authorisation that may result from this application will only cover activities specifically applied for). (Attach a proposed site plan, drawn to a scale acceptable to the competent Authority, showing the location of all the activities to be applied for, as **Appendix 2**).

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|-------------------------------|--|---------------------------|--|
| <p>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</p> <p>E.g. for mining, - excavations, blasting, stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm</p> | Ha or m ² | (Mark with an X where applicable or affected). | | (Indicate whether an authorisation is required in terms of the Waste |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|-------------------------------|-----------------|---------------------------|--|
| water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.) | | | | Management Act). (Mark with an X) |
| <p>Water pipelines</p> <p>"The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water—</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where—</p> <p>(a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area."</p> | Size to be confirmed in EIAR | X | Activity 9 of GN983 | - |
| <p>Water Pipelines for Process Water or Wastewater for Mining</p> <p>The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes –</p> <p>(i) with an internal diameter of 0,36 metres or more; or</p> <p>(ii) with a peak throughput of 120 litres per second or more;</p> <p>excluding where—</p> <p>(a) such infrastructure is for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or</p> <p>(b) where such development will occur within an urban area.</p> | Size to be confirmed in EIAR | X | Activity 10 of GN983 | - |
| <p>Infrastructure within proximity to a watercourse</p> <p>The development of—</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 100 square metres or more;</p> <p>where such development occurs—</p> | To be confirmed in EIAR | X | Activity 12 of GN983 | - |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|---|-------------------------------|-----------------|---------------------------|--------------------------------|
| <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse; — excluding—</p> <p>(aa) the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour;</p> <p>(bb) where such development activities are related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;</p> <p>(cc) activities listed in activity 14 in Listing Notice 2 of 2014 or activity 14 in Listing Notice 3 of 2014, in which case that activity applies;</p> <p>(dd) where such development occurs within an urban area;</p> <p>(ee) where such development occurs within existing roads, road reserves or railway line reserves; or</p> <p>(ff) the development of temporary infrastructure or structures where such infrastructure or structures will be removed within 6 weeks of the commencement of development and where indigenous vegetation will not be cleared.</p> | | | | |
| <p>Roads crossing watercourses or underground mining may result in excavation or infilling of more than 10 cubic metres of soils and rock from watercourse</p> <p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse;</p> <p>but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.</p> | To be confirmed in EIAR | X | Activity 19 of GN983 | |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|--|-----------------|---------------------------|--------------------------------|
| <p>Internal roads to vent shaft or escape shafts</p> <p>"The development of a road—</p> <p>(i) for which an environmental authorisation was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or</p> <p>(ii) with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;</p> <p>but excluding a road—</p> <p>(a) which is identified and included in activity 27 in Listing Notice 2 of 2014;</p> <p>(b) where the entire road falls within an urban area; or</p> <p>(c) which is 1 kilometre or shorter."</p> | Routes & area to be confirmed in EIAR | X | Activity 24 of GN983 | - |
| <p>All surface infrastructure (ventilation shafts or escape shafts)</p> <p>The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for-</p> <p>(i) the undertaking of a linear activity; or</p> <p>(ii) maintenance purposes undertaken in accordance with a maintenance management plan.</p> | To be confirmed in EIAR | X | Activity 27 of GN983 | - |
| <p>Mining (industrial) development on land previously used for agriculture</p> <p>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 and where such development:</p> <p>(i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or</p> <p>(ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare;</p> <p>excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.</p> | To be confirmed in EIAR | X | Activity 28 of GN983 | - |
| <p>Possible existing infrastructure expansion (e.g. PCDs) and use of water for Dust Suppression (i.e.: amendments to existing Water Use Licence)</p> <p>The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms</p> | Needs to be determined during the EIAR | X | Activity 34 of GN983 | - |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|-------------------------------|-----------------|---------------------------|--------------------------------|
| <p>of national or provincial legislation governing the release of emissions, effluent or pollution, excluding—</p> <p>(i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;</p> <p>(ii) the expansion of existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or</p> <p>(iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day.</p> | | | | |
| <p>Possibility of utilization of existing pipelines</p> <p>The expansion of infrastructure for the bulk transportation of water or storm water where the existing infrastructure—</p> <p>(i) has an internal diameter of 0,36 metres or more; or</p> <p>(ii) has a peak throughput of 120 litres per second or more; and</p> <p>(a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or</p> <p>(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more;</p> <p>excluding where such expansion—</p> <p>(aa) relates to transportation of water or storm water within a road reserve or railway line reserve; or</p> <p>(bb) will occur within an urban area.</p> | To be confirmed in EIAR | X | Activity 45 of GN983 | - |
| <p>Possibility of utilization of existing pipelines</p> <p>The expansion and related operation of infrastructure for the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes where the existing infrastructure—</p> <p>(i) has an internal diameter of 0,36 metres or more; or</p> <p>(ii) has a peak throughput of 120 litres per second or more; and</p> <p>(a) where the facility or infrastructure is expanded by more than 1 000 metres in length; or</p> <p>(b) where the throughput capacity of the facility or infrastructure will be increased by 10% or more;</p> <p>excluding where such expansion—</p> | To be confirmed in EIAR | X | Activity 46 of GN983 | - |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|---|--|-----------------|---------------------------|--------------------------------|
| (aa) relates to the bulk transportation of sewage, effluent, process water, wastewater, return water, industrial discharge or slimes within a road reserve or railway line reserve; or (bb) will occur within an urban area. | | | | |
| <p>Internal roads - Upgrades to existing roads</p> <p>"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre-</p> <p>(i) where the existing reserve is wider than 13,5 meters; or</p> <p>(ii) where no reserve exists, where the existing road is wider than 8 metres;</p> <p>excluding where widening or lengthening occur inside urban areas."</p> | Routes & area to be confirmed in EIA phase | X | Activity 56 of GN983 | - |
| <p>Transfer of Process Water</p> <p>The expansion of facilities or -infrastructure for the transfer of water from and to or between any combination of the following-</p> <p>(i) water catchments;</p> <p>(ii) water treatment works; or</p> <p>(iii) impoundments;</p> <p>where the capacity will be increased by 50 000 cubic metres or more per day, but excluding water treatment works where water is treated for drinking purposes.</p> | To be confirmed in EIAR | X | Activity 63 of GN983 | - |
| <p>General mining activities (roads, shafts, etc.)</p> <p>Phased activities for all activities—</p> <p>(i) listed in this Notice, which commenced on or after the effective date of this Notice or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices;</p> <p>excluding the following activities listed in this Notice-</p> <p>17(i)(a-d); 17(ii)(a-d); 17(iii)(a-d); 17(iv)(a-d); 17(v)(a-d); 20; 21; 22; 24(i); 29; 30; 31; 32;</p> <p>34; 54(i)(a-d); 54(ii)(a-d); 54(iii)(a-d); 54(iv)(a-d); 54(v)(a-d); 55; 61; 64; and 65; or</p> <p>(ii) listed as activities 5, 7, 8(ii), 11, 13, 16, 27(i) or 27(ii) in Listing Notice 2 of 2014 or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices;</p> | To be confirmed in EIAR | X | Activity 67 of GN983 | - |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|-------------------------------|-----------------|---------------------------|--------------------------------|
| <i>where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold."</i> | | | | |
| <p>Expanded mining areas triggers water uses under the National Water Act</p> <p>The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—</p> <p>(i) activities which are identified and included in Listing Notice 1 of 2014;</p> <p>(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 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;</p> <p>(iii) the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2 000 cubic metres or less; or</p> <p>(iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day.</p> | To be confirmed during EIAR | X | Activity 6 of GN984 | - |
| <p>Mine water management infrastructure</p> <p>The development of facilities or infrastructure for the transfer of 50 000 cubic metres or more water per day, from and to or between any combination of the following.</p> <p>(i) water catchments;</p> <p>(ii) water treatment works; or</p> <p>(iii) impoundments;</p> <p>excluding treatment works where water is to be treated for drinking purposes.</p> | To be confirmed in EIAR. | X | Activity 11 of GN984 | - |
| <p>All infrastructure for underground mining extension</p> <p>"The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for-</p> <p>(i) the undertaking of a linear activity; or</p> | To be confirmed in EIAR. | X | Activity 15 of GN984 | - |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|--|-----------------|---------------------------|--------------------------------|
| (ii) maintenance purposes undertaken in accordance with a maintenance management plan." | | | | |
| <p>Vunene extension underground mining and minimal surface infrastructure (shafts and roads)</p> <p>"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—</p> <p>(a) associated infrastructure, structures and earthworks, directly related to the extraction of a mineral resource; or</p> <p>(b) the primary processing of a mineral resource including winning, extraction, classifying, concentrating, crushing, screening or washing;</p> <p>but excluding the secondary processing of a mineral resource, including the smelting, beneficiation, reduction, refining, calcining or gasification of the mineral resource in which case activity 6 in this Notice applies.</p> | <p>245 ha UG mining in the Vunene extension area</p> <p>Note: UG mining in remainder of the MR area is already approved through previous applications.</p> <p>Surface infrastructure under this application (Shafts and Roads) are minimal but will be detailed in the EIAR.</p> | X | Activity 17 of GN984 | |
| <p>Roads</p> <p>The development of a road wider than 4 meters with a reserve less than 13.5 meters.</p> | To be confirmed once the Biodiversity Specialist Study has been concluded in the EIA phase. | X | Activity 4 of GN985 | |
| <p>Shafts</p> <p>The clearance of an area of 300 square meters or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004</p> | To be confirmed once the Biodiversity Specialist Study has been concluded in the EIA phase. | X | Activity 12 of GN985 | |

| Name of activity | Aerial extent of the activity | Listed Activity | Applicable listing notice | Waste management authorisation |
|--|----------------------------------|-----------------|---------------------------|--------------------------------|
| <p>Infrastructure (shafts, roads)</p> <p>The development of—</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</p> <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs—</p> <p>(a) within a watercourse;</p> <p>(b) in front of a development setback; or</p> <p>(c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p> | To be confirmed during EIA phase | X | Activity 14 of GN985 | |
| <p>Internal / Access Roads</p> <p>The widening of a road by more than 4 meters; or the lengthening of a road by more than 1 kilometre.</p> | To be confirmed during the EIAR | X | Activity 18 of GN985 | |

6. PUBLIC PARTICIPATION

Provide details of the public participation process proposed for the application as required by Regulation.

Details of the Public Participation process to be followed.

6.1.1. IDENTIFICATION OF INTERESTED AND AFFECTED PARTIES TO BE CONSULTED

| IDENTIFICATION CRITERIA | Mark with an X where applicable | |
|---|---|----|
| | YES | NO |
| Will the landowner be specifically consulted? | X | |
| Will the lawful occupier on the property other than the Landowner be consulted? | X | |
| Will a tribal authority or host community that may be affected be consulted? | X | |
| Will recipients of land claims in respect of the area be consulted? | X | |
| Will the landowners or lawful occupiers of neighbouring properties be identified? | X | |
| Will the local municipality be consulted? | X | |
| Will the Authority responsible for power lines within 100 metres of the area be consulted? | X | |
| Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted? | X | |
| Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? | X | |
| Will the Provincial Department responsible for the environment be consulted? | X | |
| Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above? | X | |
| Will all the parties identified above be requested in writing to provide information as to how their interests (whether it be socio-economic, cultural, heritage or environmental) will be affected by the proposed mining project? | X | |
| Other, Specify | <u>Any other interested and affected parties identified during the course of the EIA process.</u> | |

6.1.2. DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

| Steps to be taken to notify interested and affected parties (Describe the process to be undertaken to consult interested and affected parties including public meetings and one on one consultations. NB the affected parties must be specifically consulted regardless of whether or not they | PROVIDE DESCRIPTION HERE |
|--|---|
| | Interested and Affected Parties (I&AP's) have been notified of the project via registered letters, emails and facsimiles. Site notices and posters have been placed in and around the application area. An initial notification 30-calendar day commenting period has been undertaken for this project. The initial notification included a questionnaire requesting comment on the proposed project. Site notices have been placed in, and around, the application area. In |

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| <p>attended public meetings. Photographs of notice boards, and copies of advertisements and notices notifying potentially interested and affected parties of the proposed application must be attached as Appendix 4).</p> | <p>addition, newspaper advertisements were placed in the "The Highvelder Newspaper, which are widely distributed in the area and advertisements. The public participation process has been, and will continue to be, undertaken in accordance with the NEMA process and the 2014 Regulations, as amended. I&AP's have been provided an initial notification and a call to register for a period of 30 days. The scoping report will be made available for public review and comment for a period of 30 days, within the prescribed timeframes following submission of this Application Form. A further period of 30 days will be provided to I&AP's to comment on the WULA technical report during the EIA phase of the application process. The extra 30 days will ensure that the Water Use Licence technical report (that will form part of the EIA report) complies with the consultation requirements as specified in the NWA GNR 267.</p> <p>The information submitted by I&AP's via any form will be utilised during the Impact Assessment and compilation of the Scoping and EIAR.</p> |
| <p>Information to be provided to Interested and Affected Parties.</p> | <p>Compulsory</p> <ul style="list-style-type: none"> • The site plans. • List of activities to be authorised. • Scale and extent of activities to be authorised. • Typical impacts of activities to be authorised. • The duration of the activity. • Sufficient detail of the intended operation to enable them to assess what impact the activities will have on them or on the use of their land. <p>Other, specify:</p> <ul style="list-style-type: none"> • The purpose of the proposed project. • Details of the affected properties (including parent farm and portion). • Details of the MPRDA and NEMA Regulations that must be adhered to. • The activities being applied for. • Date by which comment, concerns and objections must be submitted. • Contact details of the Environmental Assessment Practitioner (EAP). |
| <p>Information to be required from Interested and Affected Parties.</p> | <p>Compulsory</p> <ul style="list-style-type: none"> • To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions. • To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity. • To provide information on current land uses and their location within the area under consideration. • To provide information on the location of environmental features on site to make proposals as to how, and to what standard, the impacts on site can be remedied. |

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| | <ul style="list-style-type: none"> • To mitigate the potential impacts on their socio-economic conditions to make proposals as to how the potential impacts can be managed, avoided or remedied. • Landowners to provide contact details of all land occupiers. |
| | <p>Other, Specify:</p> <ul style="list-style-type: none"> • Details of the landowner and information on lawful occupiers. • Details of any communities existing within the area. • Details of any Tribal Authorities within the area. • Details of any other I&AP's that need to be notified. • Details on any land developments proposed. • Details of any perceived impacts to the environment that should be considered in the Scoping and EIAR. • Any specific comments concerns or objections to the proposed mining expansion project. |

7. DESCRIPTION OF THE ASSESSMENT PROCESS TO BE UNDERTAKEN

| ITEM | DESCRIPTION |
|---|---|
| <p>Environmental attributes. Describe how the Environmental attributes associated with the development footprint will be determined.</p> | <p>For Scoping, the description of the existing status of the current receiving environment has been compiled through desktop data, available GIS information as well as from recent monitoring reports and available information from the existing mine. This will be updated in the EIA phase once detailed specialist investigations have been completed.</p> |
| <p>Identification of impacts and risks. (Describe the process that will be used to identify impacts and risks.</p> | <p>The identification of potential impacts and risks for assessment will be undertaken through I&AP consultation and the development of an in depth understanding of the activities, actions and processes to be undertaken on site based on the EAP's experience with similar projects as well as input from specialists. As such, the potential impacts and risks on broad environmental aspects, in respect of each of the main project actions, activities and processes will be assessed during the Scoping and EIA process.</p> |
| <p>Consideration of alternatives. Describe how alternatives, and in particular the alternatives to the</p> | <p>The identification and assessment of alternatives is a key component to the success of any EIA process. Essentially, alternatives represent different means of meeting the general purpose and need of the proposed project through the identification of the most appropriate method of development. Two levels of alternative screening will be investigated and considered which culminate into the identification of the feasible development alternative. The first level alternatives include land use, location, mining method,</p> |

| <p>proposed site layout and possible alternative methods or technology to be applied will be determined.</p> | <p>etc. These alternatives will determine the optimal placement and process for the proposed mining operation. After these viable alternatives have been assessed (if any), the level two alternatives; including technology, phasing and site layout alternatives will be considered in order to ensure the best practicable option is proposed for the activity.</p> | | | | | | | | | | | | | | | |
|---|---|---|-------|------------|--------|-----|--|----|---|--------|---|---|---|---|---|--|
| <p>Process to assess and rank impacts. Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.</p> | <p><u>Method of Assessing Impacts:</u></p> <p>The impact assessment methodology is guided by the requirements of the NEMA EIA Regulations. The broad approach to the significance rating methodology is to determine the <u>environmental risk (ER)</u> by considering the <u>consequence (C)</u> of each impact (comprising Nature, Extent, Duration, Magnitude, and Reversibility) and relate this to the <u>probability/likelihood (P)</u> of the impact occurring. This determines the environmental risk. In addition, other factors, including cumulative impacts, public concern, and potential for irreplaceable loss of resources, are used to determine a <u>prioritisation factor (PF)</u> which is applied to the ER to determine the overall <u>significance (S)</u>.</p> <p><u>Determination of Environmental Risk:</u></p> <p>The significance (S) of an impact is determined by applying a prioritisation factor (PF) to the environmental risk (ER).</p> <p>The environmental risk is dependent on the consequence (C) of the particular impact and the probability (P) of the impact occurring. Consequence is determined through the consideration of the Nature (N), Extent (E), Duration (D), Magnitude (M), and reversibility (R) applicable to the specific impact.</p> <p>For the purpose of this methodology the consequence of the impact is represented by:</p> $C = \left(\frac{E + D + M + R}{4} \right) \times N$ <p>Each individual aspect in the determination of the consequence is represented by a rating scale as defined in Table 1.</p> <p>TABLE 1: CRITERIA FOR DETERMINING IMPACT CONSEQUENCE</p> <table border="1"> <thead> <tr> <th>Aspect</th> <th>Score</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td rowspan="2">Nature</td> <td>- 1</td> <td>Likely to result in a negative/ detrimental impact</td> </tr> <tr> <td>+1</td> <td>Likely to result in a positive/ beneficial impact</td> </tr> <tr> <td rowspan="3">Extent</td> <td>1</td> <td>Activity (i.e. limited to the area applicable to the specific activity)</td> </tr> <tr> <td>2</td> <td>Site (i.e. within the development property boundary),</td> </tr> <tr> <td>3</td> <td>Local (i.e. the area within 5 km of the site),</td> </tr> </tbody> </table> | Aspect | Score | Definition | Nature | - 1 | Likely to result in a negative/ detrimental impact | +1 | Likely to result in a positive/ beneficial impact | Extent | 1 | Activity (i.e. limited to the area applicable to the specific activity) | 2 | Site (i.e. within the development property boundary), | 3 | Local (i.e. the area within 5 km of the site), |
| Aspect | Score | Definition | | | | | | | | | | | | | | |
| Nature | - 1 | Likely to result in a negative/ detrimental impact | | | | | | | | | | | | | | |
| | +1 | Likely to result in a positive/ beneficial impact | | | | | | | | | | | | | | |
| Extent | 1 | Activity (i.e. limited to the area applicable to the specific activity) | | | | | | | | | | | | | | |
| | 2 | Site (i.e. within the development property boundary), | | | | | | | | | | | | | | |
| | 3 | Local (i.e. the area within 5 km of the site), | | | | | | | | | | | | | | |

| | | |
|-------------------------|---|--|
| | 4 | Regional (i.e. extends between 5 and 50 km from the site) |
| | 5 | Provincial / National (i.e. extends beyond 50 km from the site) |
| Duration | 1 | Immediate (<1 year) |
| | 2 | Short term (1-5 years), |
| | 3 | Medium term (6-15 years), |
| | 4 | Long term (the impact will cease after the operational life span of the project), |
| | 5 | Permanent (no mitigation measure of natural process will reduce the impact after construction). |
| Magnitude/ Intensity | 1 | Minor (where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected), |
| | 2 | Low (where the impact affects the environment in such a way that natural, cultural and social functions and processes are slightly affected), |
| | 3 | Moderate (where the affected environment is altered but natural, cultural and social functions and processes continue albeit in a modified way), |
| | 4 | High (where natural, cultural or social functions or processes are altered to the extent that it will temporarily cease), or |
| | 5 | Very high / don't know (where natural, cultural or social functions or processes are altered to the extent that it will permanently cease). |
| Reversibility | 1 | Impact is reversible without any time and cost. |
| | 2 | Impact is reversible without incurring significant time and cost. |
| | 3 | Impact is reversible only by incurring significant time and cost. |
| | 4 | Impact is reversible only by incurring prohibitively high time and cost. |
| | 5 | Irreversible Impact |

Once the C has been determined the ER is determined in accordance with the standard risk assessment relationship by multiplying the C and the P. Probability is rated/scored as per Table 2.

Table 2: Probability Scoring

| | | |
|-------------|---|--|
| Probability | 1 | Improbable (the possibility of the impact materialising is very low as a result of design, historic experience, or implementation of adequate corrective actions; <25%), |
| | 2 | Low probability (there is a possibility that the impact will occur; >25% and <50%), |
| | 3 | Medium probability (the impact may occur; >50% and <75%), |

| | | |
|--|---|--|
| | 4 | High probability (it is most likely that the impact will occur- > 75% probability), or |
| | 5 | Definite (the impact will occur), |

The result is a qualitative representation of relative ER associated with the impact. ER is therefore calculated as follows:

$$ER = C \times P$$

Table 3: Determination of Environmental Risk

| | | | | | | |
|-------------|---|---|----|----|----|----|
| Consequence | 5 | 5 | 10 | 15 | 20 | 25 |
| | 4 | 4 | 8 | 12 | 16 | 20 |
| | 3 | 3 | 6 | 9 | 12 | 15 |
| | 2 | 2 | 4 | 6 | 8 | 10 |
| | 1 | 1 | 2 | 3 | 4 | 5 |
| | | 1 | 2 | 3 | 4 | 5 |
| Probability | | | | | | |

The outcome of the environmental risk assessment will result in a range of scores, ranging from 1 through to 25. These ER scores are then grouped into respective classes as described in Table 4.

Table 4: Significance Classes

| Environmental Risk Score | |
|--------------------------|--|
| Value | Description |
| < 9 | Low (i.e. where this impact is unlikely to be a significant environmental risk), |
| ≥9; <17 | Medium (i.e. where the impact could have a significant environmental risk), |
| ≥ 17 | High (i.e. where the impact will have a significant environmental risk). |

The impact ER will be determined for each impact without relevant management and mitigation measures (pre-mitigation), as well as post implementation of relevant management and mitigation measures (post-mitigation). This allows for a prediction in the degree to which the impact can be managed/mitigated.

Impact Prioritisation:

Further to the assessment criteria presented above it is necessary to assess each potentially significant impact in terms of:

- Cumulative impacts; and
- The degree to which the impact may cause irreplaceable loss of resources.

In addition, it is important that the public opinion and sentiment regarding the development and consequent potential impacts is considered in the decision-making process. In an effort to ensure that these factors are considered, an impact prioritisation factor (PF) will be applied to each impact ER (post-mitigation). This prioritisation factor does not aim to detract from the risk ratings but rather to focus the attention of the decision-making authority on the higher priority/significance issues and impacts. The PF will be applied to the ER score based on the assumption that relevant suggested management/mitigation measures are implemented.

Table 5: Criteria for Determining Prioritisation

| | | |
|--------------------------------------|------------|---|
| Public response (PR) | Low (1) | Issue not raised in public response. |
| | Medium (2) | Issue has received a meaningful and justifiable public response. |
| | High (3) | Issue has received an intense meaningful and justifiable public response. |
| Cumulative Impact (CI) | Low (1) | Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is unlikely that the impact will result in spatial and temporal cumulative change. |
| | Medium (2) | Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is probable that the impact will result in spatial and temporal cumulative change. |
| | High (3) | Considering the potential incremental, interactive, sequential, and synergistic cumulative impacts, it is highly probable/definite that the impact will result in spatial and temporal cumulative change. |
| Irreplaceable loss of resources (LR) | Low (1) | Where the impact is unlikely to result in irreplaceable loss of resources. |
| | Medium (2) | Where the impact may result in the irreplaceable loss (cannot be replaced or substituted) of resources but the value (services and/or functions) of these resources is limited. |
| | High (3) | Where the impact may result in the irreplaceable loss of resources of high value (services and/or functions). |

The value for the final impact priority is represented as a single consolidated priority, determined as the sum of each individual criteria represented in **Table 5**. The impact priority is therefore determined as follows:

$$\text{Priority} = \text{PR} + \text{CI} + \text{LR}$$

The result is a priority score which ranges from 3 to 9 and a consequent PF ranging from 1 to 2 (Refer to Table 6).

Table 6: Determination of Prioritisation Factor

| Priority | Ranking | Prioritisation Factor |
|----------|---------|-----------------------|
| 3 | Low | 1 |

| | | |
|---|--------|------|
| 4 | Medium | 1.17 |
| 5 | Medium | 1.33 |
| 6 | Medium | 1.5 |
| 7 | Medium | 1.67 |
| 8 | Medium | 1.83 |
| 9 | High | 2 |

In order to determine the final impact significance, the PF is multiplied by the ER of the post mitigation scoring. The ultimate aim of the PF is to be able to increase the post mitigation environmental risk rating by a full ranking class, if all the priority attributes are high (i.e. if an impact comes out with a medium environmental risk after the conventional impact rating, but there is significant cumulative impact potential, significant public response, and significant potential for irreplaceable loss of resources, then the net result would be to upscale the impact to a high significance).

Table 7: Final Environmental Significance Rating

| Environmental Significance Rating | |
|-----------------------------------|---|
| Value | Description |
| < -10 | Low Negative (i.e. where this impact would not have a direct influence on the decision to develop in the area), |
| ≤ -10 > -20 | Medium Negative (i.e. where the impact could influence the decision to develop in the area), |
| ≤ -20 | High Negative (i.e. where the impact must have an influence on the decision process to develop in the area). |
| < 10 | Low Positive (i.e. where this impact would not have a direct influence on the decision to develop in the area), |
| ≥ 10 < 20 | Medium Positive (i.e. where the impact could influence the decision to develop in the area), |
| ≥ 20 | High Positive (i.e. where the impact must have an influence on the decision process to develop in the area). |

Contribution of specialist reports
Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.

Several EIA-phase specialist studies will be undertaken to address the key issues that required further investigation. The specialist studies involved the gathering of data relevant to identifying and assessing environmental impacts that may occur because of the proposed project. These impacts were then assessed according to pre-defined rating scales. Specialists also recommend appropriate mitigation / control or optimisation measures to minimise potential negative impacts or enhance potential benefits, respectively. The following specialist studies are likely to be required and undertaken in the EIA phase:

- Hydrological Study;
- Hydrogeological Study;
- Heritage and Archaeological Study;
- Wetland Studies; and
- Closure Plan and Quantum Update.

All specialists are required to adhere to the EAPs method of assessing impacts, as detailed above. No specialist studies will be undertaken during scoping phase. Specialist studies will be commissioned, and the results will inform the EIA phase assessment with input into the sensitivity mapping.

It is crucial to note that the Sensitivity Mapping is to be used as a first level mechanism to provide guidance (where viable) regarding design and layout and identify operational alternatives for further assessment. In addition, the mapping exercise allows the identification of certain spatial characteristics which may not be compatible or desirable for the purpose of infrastructure placement as well as (where possible) circumnavigating potential fatal flaws.

Determination of impact management

The objectives of the impact management measures shall be to firstly anticipate and avoid risks and impacts. This shall be accomplished through the adoption of a risk and impact assessment process which aims to identify all relevant environmental and social risks and receptors that are likely to be

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| <p>objectives and outcomes. Describe how impact management objectives will be determined for each activity to address the potential impact at source, and how the impact management outcomes will be aligned with standards.</p> | <p>affected by such risks and impacts, including the issues identified by I&AP's during the consultation process. The impact and risk identification process shall take into consideration each activity and its associated potential impacts. The impact management objectives will be incorporated into and EMPR. The EMPR developed for the project shall include mechanisms whereby social and environmental risks and impacts shall be avoided and mitigated. The objectives of this environmental management framework shall be:</p> <ul style="list-style-type: none"> • To anticipate potential risks and impacts associated with each activity pre-emptively through the implementation of risk assessment techniques and early warning systems such as environmental monitoring and inspections; • To develop and implement preventative measures to ensure known risks and impacts are addressed at source wherever possible (e.g. spill prevention procedures); • To implement detailed management measures to ensure that where avoidance of impacts is not possible, mitigation measures are in place to minimize impacts to workers, affected landowners/occupiers/communities, and the environment; and • To provide a framework for adaptive environmental management within the EMPR whereby impacts from unplanned events or incidents caused by the project may be effectively controlled to minimise impacts to workers, affected landowners/occupiers/communities, and the environment. <p>The management and mitigation measures shall be developed in accordance with applicable standards and guidelines, which may include, but is not limited to:</p> <ul style="list-style-type: none"> • Legislated Standards (e.g.: air quality guidelines and standards); • South African National Standards (SANS) (e.g.: SANS water quality standards); • Where Applicable, International Standards and Guidelines; • Applicable National and Regional Frameworks (e.g.: Bioregional Plans; Spatial Development Frameworks, National Protected Area Expansion Strategy Focus Areas, Environmental Management Frameworks, etc.); • Applicable Guidelines developed by authorities (e.g.: DMR guidelines, NEMA EIA guidelines); and • Other Applicable guidelines (e.g.: Mining and Biodiversity Guidelines). <p>To ensure that the impact management outcomes can be monitored, and performance evaluated, performance targets and indicators shall be developed where appropriate. Compliance and alignment with the prescribed standards shall be measured against the defined Performance Targets and Indicators through the implementation of a system of inspections and compliance monitoring as defined in the EMPR.</p> |
|---|---|

8. OTHER AUTHORISATIONS REQUIRED

| LEGISLATION | Mark with an X where applicable | | | |
|--|---------------------------------|----|-----------------------|----|
| | AUTHORISATION REQUIRED | | APPLICATION SUBMITTED | |
| | YES | NO | YES | NO |
| SEMA's | | | | |
| National Environmental Management: Air Quality Act | | X | | X |
| National Environmental Management: Biodiversity Act | | X | | X |
| National Environmental Management: Integrated Coastal Management Act | | X | | X |

| | | | | |
|--|---|---|---|---|
| National Environmental Management: Protected Areas Act | | X | | X |
| National Environmental Management: Waste Act | | X | | X |
| National legislation | | | | |
| Mineral Petroleum Development Resources Act | X | | X | |
| National Water Act | X | | | X |
| National Heritage Resources Act | | X | | X |
| Others: Please specify | | X | | X |

Please provide proof of submission of applications in Appendix 5¹.

In the event that an authorization in terms of the National Environmental Waste Management Act is required for any of the activities applied for please state so clearly in order for such an authorisation to be considered as part of this application.

Please take note that the applicability of the following Acts listed below will be confirmed during the EIA Phase of the project:

- National Environmental Management: Biodiversity Act (particularly relating to permit applications for the removal/relocation of potential protected species identified on site); and
- National Heritage Resources Act (particularly relating to potential heritage features and archaeological finds).

Should it be found that any listed activities within these Acts will be triggered; the necessary permit and license application process will be followed in accordance with the regulations. As far as possible, the intended outcome of the EIA and EMPR is to prevent the impacts relating to the above-mentioned legislation.

9. DRAFT EMPR

For consultation purposes, provide a high-level approach to the management of the potential environmental impacts of each of the activities applied for.

| ACTIVITIES | PHASE | SIZE AND SCALE ² (of Disturbance) | TYPICAL MITIGATION MEASURES | COMPLIANCE WITH STANDARDS |
|--|---|---|--|---|
| (E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc E.g. for mining, - excavations, blasting, | (of operation in which activity will take place). State; Planning and design, Pre-Construction' Construction, Operational, | (volumes, tonnages and hectares or m ²) | (Eg, storm water control, dust control, noise control, access control, | (A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been |

¹ All applications are captured by this application. Applications to DWS to be completed once final EIA report is ready for submission.

² The size and scale of disturbance is a rough estimated at this stage. More accurate estimates will be provided during the EIA phase.

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| stockpiles, discard dumps or dams, Loading, hauling and transport, Water supply dams and boreholes, accommodation, offices, ablution, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.) | Rehabilitation, Closure, Post closure. | | rehabilitation etc...., etc....,) | identified by Competent Authorities) |
| Excavations/mining | Construction / operation | To be assessed during EIA phase. | Rehabilitation, avoidance of high sensitivity areas, dust and noise control | The typical mitigation measures recommended will comply with all prescribed environmental management standards and practices. |
| Blasting | Construction / operation | 500m radius from blast point | Noise control, health and safety | |
| Power Line, roads, & pipelines | Operation | To be assessed during EIA phase. | Avoidance of sensitive areas | |
| Additional infrastructure (Conveyors and Ventilation shaft) | Construction / Operation | To be assessed during EIA phase. | Avoidance of sensitive areas | |
| Pollution Control Dam | Operation | To be assessed during EIA phase. | Water and salt balance update, stormwater management | |
| Social issues | All phases | N/A | Compensation, protocols | |

10. CLOSURE PLAN

In the space provided under each heading below, please provide a high-level description of the plan for closure and the information that will be provided in the draft EMPR accompanying the draft basic assessment report or environmental impact reports going forward.

| | |
|--|--|
| <p>Baseline environment</p> <p>Describe how the baseline environment will be determined with the input of interested and affected parties and due cognizance of the current land uses and or existing biophysical environment</p> | <p>The baseline environment will be assessed in two phases namely:</p> <ul style="list-style-type: none"> • Phase 1: Scoping & Sensitivity Mapping; and • Phase 2: Environmental Impact Assessment (EIA) and Integrated Environmental Management Programme (IEMPR) <p>Phase 1: Scoping:</p> <p>This will require a detailed desktop investigation by the EAP to familiarise themselves with the proposed application area and broadly determine the existing status quo of the receiving environment.</p> <p>The EAP will compile the Scoping Report. The Scoping Report will conform to the requirements of the previously mentioned Acts and include the following:</p> <ul style="list-style-type: none"> • A description of the receiving environment; • Identification and description of anticipated impacts; • Identify and describe reasonable land use or development alternatives; • A description of the process used to engage I&AP's and other Stakeholders; • A high-level impact assessment with the inclusion of preliminary mitigation measures; and • A description of further investigations required in the EIA (Plan of Study). <p>Review of the report by I&AP's and submission of the report to the authorities will conclude Phase 1.</p> <p>Phase 2: Integrated Environmental Impact Assessment (IEIA) and Environmental Management Programme (EMPR):</p> <p>During the EIA phase of the project, a more detailed investigation will be undertaken for the likely disturbance footprint. On completion of the EIA level assessments, the EAP will begin compilation of the EMPR. The IEIA and EMPR will include the following information:</p> <ul style="list-style-type: none"> • A detailed description of the receiving environment; • A description of the Public Participation Process methodology; • A record of the findings of the Public Participation Process; • An Environmental Impact Assessment (EIA) during all project phases; • An Environmental Management Programme (EMPR) during all project phases; • Closure and Rehabilitation Plans; • Calculation of the Financial Provisions; • A detailed description of the need and desirability of the proposed activity including advantages and disadvantages that the activity will have to the environment and community; • A description of the methodology used in determining significance of identified impacts; • A description and comparative assessment of all alternatives identified; • A summary of the findings and recommendations of any Specialist Studies; • A description of all identified impacts and an assessment of the significance of each impact before and after implementation of proposed mitigation measures; • A description of assumptions, uncertainties and gaps in knowledge; |
|--|--|

| | |
|--|--|
| | <ul style="list-style-type: none"> • A recommendation as to whether the activity should be authorised and under what conditions; • An Environmental Impact Statement including key findings; • A draft Environmental Management Plan; and • Copies of any and all specialist studies carried out. <p>Each identified impact will be assessed for significance by investigating and ranking the nature, duration, extent, magnitude and probability of each impact. In addition to this the reversibility and the potential for irreplaceable loss of resources will also be assessed. In accordance with the requirements of the EIA regulations a Draft Environmental Management Programme (EMPR) will also be prepared.</p> <p>Following submission of the IEIA, Specialist Studies and Draft EMPR to the registered I&APs for review and comment, the final submission will be made to the DMR.</p> <p>Public Participation Process:</p> <p>The Public Participation Process (PPP) will be robust and continue to engage interested and affected parties (I&APs) throughout the all phases of the project. As a result of the public notifications, a register will be opened and maintained which will record all contact details of persons whom have submitted written comments or responded to the notification and who have requested that they be registered as I&APs. All registered I&APs will be informed of the required process of involvement as defined by the EIA regulations. All objections and representations received from I&APs will be collected and considered in this application. Responses will be prepared and distributed to those I&APs who submitted comments and/or objections. These comments /objections and responses will be recorded in an Issues and Responses Report (IRR) for inclusion into the Scoping Report and EIA Report respectively. In addition, the registered I&APs will be given an opportunity to comment on all reports prepared to be submitted to the DMR.</p> |
| <p>Closure objectives</p> <p>Describe the closure objectives and the extent to which they will be aligned to the baseline environment</p> | <p>The EMPR shall include a closure and rehabilitation plan. The plan shall outline the closure objectives which are, where applicable, aimed at reinstating the landform, land use and vegetation units to the pre-mining land use or similar.</p> <p>Rehabilitate the land which was impacted by the mining activity and the related infrastructure to meet the closure objectives;</p> <ul style="list-style-type: none"> • Remove all infrastructure built in relation to the mining operations which will not be used by the landowners or a third party. Should it happen that the third party may want to use the infrastructure, appropriate arrangements should be made to ensure long term sustainable use of the infrastructure; • Follow a process of closure that is progressive and integrated into the short and long-term plans; • Assess the closure impacts proactively at regular intervals throughout project life; • Implement progressive rehabilitation measures, beginning during the construction phase wherever possible; • Monitor and manage water on site to minimise soil, surface/groundwater contamination; • Comply with national closure and rehabilitation regulatory requirements; • Form active partnerships with local communities to take management of the land after the project has ceased, where possible; and • Maintain and monitor all rehabilitated areas following re-vegetation. If monitoring shows that the objectives have been met, an application for closure can be made. |

| | |
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| <p>Rehabilitation Plan</p> <p>Describe the scale and aerial extent of the prospecting or mining listed activities to be authorised, including the anticipated prospecting or mining area at the time of closure, and confirm that a site rehabilitation plan drawn to a suitable scale will be provided in the draft EMPR to be submitted together with the draft EIR or Basic Assessment Report as the case may be.</p> | <p>The extent of the proposed new underground mining area is approximately 825.45ha. It is expected that the area will be fully rehabilitated at closure.</p> <p>As the Mooiplaats Colliery Vunene Project will use the existing Mooiplaats Colliery infrastructure, minimal additional infrastructure will be required. Two additional ventilation shafts will be required at, as well as various rescue boreholes and access roads. A rehabilitation plan will be drawn to a suitable scale and provided in the EIAR.</p> |
| <p>Rehabilitation Cost</p> <p>Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof</p> | <p>The quantum for financial provision will be calculated using the Financial Provisioning Regulations, GN1147 (2015) in terms of the NEMA.</p> <p>The rehabilitation cost will be calculated in detail with input from the various specialists assigned to the project and will be subject to annual review. Furthermore, the rehabilitation cost will also be based on implementation of the management measures to be included in the EMPR and revised accordingly for inclusion into the EIA.</p> |
| <p>Decommissioning</p> <p>Considering that rehabilitation must take place upon cessation of an activity, describe when each of activities applied for will be rehabilitated in terms of either the cessation of the individual activity or the cessation of the overall prospecting/exploration</p> | <p>Decommissioning and closure will be described in detail in the EMPR.</p> |

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| or mining/production activity. | |
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Signature of the applicant / Signature on behalf of the applicant:

Langcarel RF (Pty) Ltd.

Name of company (if applicable):

12/8/2019.

Date: