



## mineral resources

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

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).

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### 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 nor 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	APPLICATION FEE	MARK WITH AN X WHERE APPLICABLE
NEMA S&EIR application on its own	R 10 000.00	-
NEMA BAR application on its own	R 2 000.00	<b>X</b>
NEMWA S&EIR application on its own	R 10 000.00	-
NEMWA BAR application on its own	R 2 000.00	-
NEMA S&EIR application combined with NEMWA S&EIR application	R 15 000.00	-
NEMA BAR application combined with NEMWA BAR application	R 3 000.00	-
NEMA S&EIR application combined with NEMWA BAR application	R 11 000.00	-

**1. CONSULTATION BASIC ASSESSMENT AND/ OR SCOPING REPORT**

**2. DETAILS OF THE APPLICANT**

Project applicant:	Solium Energy (Pty) Ltd		
Registration no (if any):	2022/590571/07		
Trading name (if any):	N/A		
Responsible Person (e.g. Director, CEO, etc.):	Mr. Caspian Tavallali		
Contact Person:	Mr. Caspian Tavallali		
Physical address:	57/63 Line Wall Road Gibraltar, GX11 1AA		
Postal address:	57/63 Line Wall Road Gibraltar, GX11 1AA		
Postal code:	7129	Cell:	+33 6 52 88 00 92
Telephone:	+33 6 52 88 00 92	Fax:	-
E-mail:	<a href="mailto:caspian@ropa.gi">caspian@ropa.gi</a> <a href="mailto:contact@ropa.gi">contact@ropa.gi</a>		

**3. ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP) INFORMATION**

EAP:	Zoe Norval Sonette Smit (Supervisor)		
Professional affiliation/registration:	Zoe Norval (Candidate EAPASA: 2021/3941) Sonette Smit (Registered EAPASA: 2020/2467)		
Contact Person (if different from EAP):	Mrs. M Saal		
Company:	Greenmined Environmental (Pty) Ltd		
Physical address:	106 Baker Square, Block 1, Paardevlei, De Beers Avenue, Somerset West, 7130		
Postal address:	Suite 62, Private Bag X15, Somerset West		
Postal code:	7129	Cell:	072 759 9059/ 084 585 5706
Telephone:	021 851 2673	Fax:	
E-mail:	<a href="mailto:zoe@greenmined.co.za">zoe@greenmined.co.za</a> <a href="mailto:Sonette.s@greenmined.co.za">Sonette.s@greenmined.co.za</a>		086 546 0579

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**

<b>Farm Name:</b>	Kamaggas No. 200
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	<p>Drie Rivier No. 268</p> <p>Polly`s Kloof No. 267</p> <p>Sannagas No. 269</p> <p>Klipfontein No. 266</p>
<b>Application area (Ha)</b>	88 763 Ha
<b>Magisterial district:</b>	Namaqualand
<b>Distance and direction from nearest town</b>	± 30 km west of Springbok Town
<b>21 digit Surveyor General Code for each farm portion</b>	<p>N062C053000000000200000000</p> <p>N062C053000000000268000000</p> <p>N062C053000000000267000000</p> <p>N062C053000000000269000000</p> <p>N062C053000000000266000000</p>
<b>Locality map</b>	Attach a locality map at a scale not smaller than 1:250000 and attach as <b>Appendix 2</b>
<p><b>Description of the overall activity.</b></p> <p>Indicate Mining Right, Mining Permit, Prospecting right, Bulk Sampling, Production Right, Exploration Right, Reconnaissance permit, Technical co-operation permit, Additional listed activity)</p>	<p>Solium Energy (Pty) Ltd (Pty) Ltd (the “Applicant”) applies for environmental authorisation and a prospecting right without bulk sampling, for Uranium Ore over ±88 763ha of the Farms Kamaggas No. 200, Drie Rivier No. 268, Polly`s Kloof No. 267, Sannagas No. 269, Klipfontein No. 266.</p> <p>Should the relevant authorisations be granted, and the project commence the principal prospecting activities will entail the following:</p> <ul style="list-style-type: none"> <li>❖ Non-Invasive Prospecting: <ul style="list-style-type: none"> <li>○ Desktop geological studies (Year 1),</li> <li>○ Surface Mapping (Year 2-3),</li> <li>○ Radon Emanometry (Year 2-3),</li> <li>○ Interpretation and Analysis of Field Results (Year 2-3).</li> </ul> </li> <li>❖ Invasive Prospecting: <ul style="list-style-type: none"> <li>○ Target Drilling (Year 4),</li> <li>○ Infill Drilling (Year 4).</li> </ul> </li> </ul> <p>Once the target areas were identified (during non-invasive prospecting) and the invasive prospecting commences (only in year 4), site establishment will entail discussions with the landowner regarding access to the property, the clearance of vegetation (where necessary) from the areas to be prospected, the stripping and stockpiling of the topsoil, and the introduction of the prospecting equipment.</p>

Drill site will entail Reverse Circulation (RC) and Diamond (Core) drilling methods approximately (10m x 10m) in area at a maximum of 4 sites at any given time. Total disturbance less than 0.05 ha.

Boreholes will vary between 10 - 30 boreholes to be drilled throughout the prospecting area. Total disturbance less than 0.3 ha for the entire life of the prospecting right area.

Approximately 5 tons of drill core are expected to be generated during each drilling phase. The entirety of this material will be transported off-site, with approximately 10% being sent to a laboratory for analysis. The transportation of the core is typically carried out using standard single-cab bakkie using existing roads.

The prospecting activities does not require bulk sampling nor the use of any permanent equipment/infrastructure. A central site camp will be established at an area agreed to by the landowner where lay down areas for equipment storage, on some occasions temporary shading or use temporary office tents will be used. Chemical ablutions will be established, and the site camp (laydown area) will be fenced to control access. All chemicals/hydrocarbons will be kept in the storage containers or bunded areas with impermeable surfaces.

#### Testing:

Approximately 5 tons of drill core are expected to be generated during each drilling phase and will be sent to an off-site laboratory to be crushed, split, pulverized, and analysed.

#### Electricity Need:

The prospecting activities does not require electricity as all equipment will be powered with generators.

#### Water Use:

Water will be used for drilling, and dust suppression at the prospecting sites and access roads. Potable water will daily be transported to site, while the process water will be bought from a local sources (to be identified) in the vicinity of the prospecting activities.

#### Waste Handling:

The general waste generated at the prospecting sites will be transported to the site camp where it will be contained in refuse bins. Once full the refuse bins will be emptied, and the waste will be disposed of at a registered landfill site in the vicinity of the project.

Hazardous waste will be contained in designated hazardous waste containers to be removed daily to the hazardous waste storage area at the site camp. A registered contractor will be appointed to collect and dispose of the hazardous waste at a registered hazardous waste handling facility and the site will file the proof of safe disposal for auditing purposes.

	<p>The chemical toilets will weekly be serviced by an appropriately qualified sewerage handling contractor who will furnish the site with proof of safe disposal.</p> <p>Servicing and Maintenance</p> <p>No workshop, wash bay or service areas will be established at the prospecting sites and/or site camp. When needed maintenance/servicing of the equipment will be performed at the contractor's off-site workshop.</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. Pleathat involves more than one listed activity that, together, make up one development proposal, all the listed activities pertaining to this application must be indse 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 4**)

<b>NAME OF ACTIVITY</b>  <b>(E.g. For prospecting - drill site, site camp, ablution facility, accommodation, equipment storage, sample storage, site office, access route etc...etc...etc</b> <b>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 water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)</b>	<b>Aerial extent of the Activity. Ha or m<sup>2</sup></b>	<b>LISTED ACTIVITY</b>  (Mark with an <b>X</b> where applicable or affected).	<b>APPLICABLE LISTING NOTICE</b> <i>(GNR 544, GNR 545 or GNR 546)</i>	<b>WASTE MANAGEMENT AUTHORIZATION</b> (Indicate whether an authorisation is required in terms of the Waste Management Act). <b>(Mark with an X )</b>
<b>Year 1: Non-Invasive Prospecting</b>  Desktop Geological Study: Literature Survey / Review	N/A: Non-invasive Prospecting	N/A	N/A	N/A
<b>Year 2-3: Non-Invasive Prospecting</b>  Surface Mapping  Radon Emanometry	N/A: Non-invasive Prospecting	N/A	N/A	N/A
<b>Year 4: Invasive Prospecting</b>  Target Drilling Infill Drilling  (Drill site will entail Reverse Circulation (RC) and Diamond (Core) drilling methods approximately (10m x 10m) in area at a maximum of 4 sites at any given time 100 m <sup>2</sup> each. Total disturbance (±0.05 ha).	4 sites at any given time 100 m <sup>2</sup> each. Total disturbance (±0.05 ha).	X	GNR 983 Listing Notice 1 of 2014 (as amended)	N/A
<b>Year 4: Non-Invasive Prospecting</b> Testing and Analysis.	N/A: Non-invasive Prospecting	N/A	N/A	N/A

NAME OF ACTIVITY	Aerial extent of the Activity. Ha or m <sup>2</sup>	LISTED ACTIVITY	APPLICABLE LISTING NOTICE	WASTE MANAGEMENT AUTHORIZATION
<b>Year 5: Non-Invasive Prospecting</b>  Analytical Desktop Pre-Feasibility Study.  Feasibility Study and Mining Right Application (if applicable).	N/A: Non-invasive Prospecting	N/A	N/A	N/A

## 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	N/A
Will the lawful occupier on the property other than the Landowner be consulted?	N/A	N/A
Will a tribal authority or host community that may be affected be consulted?	N/A	N/A
Will recipients of land claims in respect of the area be consulted?	If applicable	N/A
Will the landowners or lawful occupiers of neighboring properties been identified?	X	N/A
Will the local municipality be consulted?	X	N/A
Will the Authority responsible for power lines within 100 meters of the area be consulted?	X	N/A
Will Authorities responsible for public roads or railway lines within 100 metres of the area applied for be consulted?	X	N/A
Will authorities responsible for any other infrastructure within 100 metres of the area applied for be consulted? (Specify)	N/A	N/A
Will the Provincial Department responsible for the environment be consulted?	X	N/A
Will all of the parties identified above be provided with a description of the proposed mining /prospecting operation as referred above?	X	N/A
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	N/A
Other, Specify		

## 6.1.2. DETAILS OF THE ENGAGEMENT PROCESS TO BE FOLLOWED

<p><b>Steps to be taken to notify interested and affected parties</b></p> <p><b>parties</b> (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 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 <b>Appendix</b>)</p>	<p><b>PROVIDE DESCRIPTION HERE</b></p> <p>During the initial public participation process the stakeholders and I&amp;AP's will be informed of the project by means of notification letters that will either be delivered by hand or sent directly to the contact persons. Advertisements will be placed in relevant newspaper/s, and on-site notices will be placed at conspicuous places.</p> <p>The I&amp;AP's and stakeholders will be informed of the availability of the draft Basic Assessment Report (DBAR) for their perusal. A 30 days commenting period will be allowed. The comments received on the DBAR will be incorporated into the final BAR to be submitted to the DMRE for decision making.</p>
<p><b>Information to be provided to Interested and Affected Parties</b></p>	<p><b>Compulsory</b></p> <ul style="list-style-type: none"> <li>• The site plan.</li> <li>• List of activities to be authorized</li> <li>• Scale and extent of activities to be authorized</li> <li>• Typical impacts of activities to be authorized ( e.g. surface disturbance, dust, noise, drainage, fly rock etc.)</li> <li>• The duration of the activity.</li> <li>• 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)</li> </ul> <p><b>Other, specify:</b> Draft BAR</p>
<p><b>Information to be required from Interested and Affected Parties.</b></p>	<p><b>Compulsory</b></p> <ul style="list-style-type: none"> <li>• To provide information on how they consider that the proposed activities will impact on them or their socio-economic conditions</li> <li>• To provide written responses stating their suggestions to mitigate the anticipated impacts of each activity</li> <li>• To provide information on current land uses and their location within the area under consideration</li> <li>• 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. requested to make written proposals</li> <li>• To mitigate the potential impacts on their socio economic conditions to make proposals as to how the potential impacts on their infrastructure can be managed, avoided or remedied).</li> </ul> <p><b>Other, Specify</b> N/A</p>

## 7. DESCRIPTION OF THE ASSESSMENT PROCESS TO BE UNDERTAKEN

ITEM	DESCRIPTION
<p><b>Environmental attributes.</b> Describe how the Environmental attributes associated with the development footprint will be determined.</p>	<p>A detailed site- and sensitivity analysis of the environmental attributes of the proposed footprint will be performed through investigation of the actual prospecting area, desktop studies and information obtained from bioregional plans, maps, and specialist studies (if needed).</p>



	Information gathered during the public participation process will also be used to highlight environmental aspects associated with the proposed project.
<p><b>Identification of impacts and risks.</b> (Describe the process that will be used to identify impacts and risks.)</p>	The impacts and risks associated with the proposed project will be identified through investigation of the specific site aspects, outcome of specialist studies, consultation with the I&AP's and stakeholders as well as desktop and background studies done on the study and surrounding areas of associated projects.
<p><b>Consideration of alternatives.</b> Describe how alternatives, and in particular the alternatives to the proposed site layout and possible alternative methods or technology to be applied will be determined.</p>	<p><b><u>Site Alternatives:</u></b></p> <p>Presently, the project proposal entails the prospecting of the Farms Kamaggas No. 200, Drie Rivier No. 268, Polly's Kloof No. 267, Sannagas No. 269, Klipfontein No. 266. The proposed footprint was based on the available geological information which is of interest to Uranium Ore.</p> <p><b><u>Activity and Technology Alternatives:</u></b></p> <p>The proposed activity entails prospecting (without bulk sampling). Presently it is proposed that prospecting will be conducted using a combination of non-invasive and invasive activities. The invasive prospecting will include borehole drilling. The proposed sampling method has been developed over many years by the mining industry and is the preferred method for resource estimation. These methods cannot easily be replaced by other methods. The only other alternative would be to prospect the area with bulk sampling.</p> <p>Although several types of drilling tools and machinery exists for prospecting, the Applicant proposes to use Reverse Circulation (RC) and Diamond (Core) drilling techniques for core drilling.</p> <p><b>Target Drilling</b></p> <p>The target drilling stage will focus on areas identified as having high potential for mineralisation, based on a comprehensive analysis of historical data, recent mapping, and radioactive anomalies detected during earlier exploration phases. The drilling program will employ both Reverse Circulation (RC) and Diamond (Core) drilling techniques to achieve an accurate evaluation of the subsurface. RC drilling will be used initially to provide rapid and cost-effective coverage of the target zones, allowing for the collection of continuous samples and the identification of key geological horizons. Following this, Diamond drilling will be implemented to obtain high-quality core samples, which are essential for detailed geological, structural, and mineralogical analysis.</p> <p><b>Infill Drilling</b></p> <p>The subsequent infill drilling stage is designed to build upon the initial drilling results, with the goal of refining the understanding of the mineralised zones and progressing towards a resource estimation that meets industry standards. This phase will involve a more closely spaced drilling pattern, using both Reverse Circulation (RC) and Diamond (Core) drilling methods, to ensure a higher resolution of geological and grade continuity within the identified ore body. Infill</p>

	<p>drilling will provide the necessary data to confirm the thickness, grade distribution, and extent of the mineralisation, reducing the uncertainty and variability in the resource model. The detailed core samples obtained will be critical for geostatistical analysis, allowing for a more accurate definition of the resource size, quality, and economic potential.</p> <p>If alternative options arise during the EIA phase these will be considered to identify the best possible option that will accommodate the prospecting need, as well as have the least possible impact on the receiving environment.</p>
<p><b>Process to assess and rank impacts.</b> Describe the process to be undertaken to identify, assess and rank the impacts and risks each individual activity.</p>	<p>Presently it is expected that the environmental significance assessment methodology that will be used to assess and rank the impacts will be based on the following determination:</p> <p style="text-align: center;">Environmental Significance = Overall Consequence X Overall Likelihood.</p> <p>This method will assist in ranking the identified impacts according to low, medium, and high significance. A full explanation of the methodology to be used in the above matter will be discussed in the environmental documentation to be submitted for approval.</p>
<p><b>Contribution of specialist reports</b> Describe how specialist reports, if required, will be taken into consideration and inform the impact identification, assessment and remediation process.</p>	<p>Once the areas of interest were identified during the non-invasive phases (Year 1 -3) and the prospecting plan was finalised the specialist will visit the areas to be prospected prior to the start of the invasive prospecting activities. Prospecting activities will involve the drilling of prospecting boreholes across four sites at a time, each with an area of 100 m<sup>2</sup>, resulting in a total disturbance of approximately 0.05 hectares. The borehole sites will be strategically relocated based on environmental sensitivity to minimize any potential impact on the receiving environment. Consequently, it is not anticipated that extensive specialist studies will be necessary for the purpose of this application. Presently it is proposed that the following specialists may be involved in this project as per the screening report:</p> <ul style="list-style-type: none"> <li>➤ Palaeontology and</li> <li>➤ Aquatic and Terrestrial Biodiversity Specialist.</li> </ul>
<p><b>Determination of impact management objectives and outcomes.</b> 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>The impacts will be ranked as stated above. This will allow the identification of impacts deemed to have a Medium to High significance, requiring mitigation and management objectives. These objectives will be aligned with guidelines and specific requirements of the relevant managing authorities and will be listed in the EMP<sub>r</sub> to be submitted with the Basic Assessment Report.</p>

## 8. OTHER AUTHORISATIONS REQUIRED

LEGISLATION	Mark with an X where applicable			
	AUTHROISATION REQUIRED		APPLICATION SUBMITTED	
	YES	NO	YES	NO
<b>SEMA</b> s				
National Environmental Management: Air Quality Act	N/A	<b>X</b>	N/A	N/A
National Environmental Management: Biodiversity Act	N/A	<b>X</b>	N/A	N/A

National Environmental Management: Integrated Coastal Management Act	N/A	X	N/A	N/A
National Environmental Management: Protected Areas Act	N/A	X	N/A	N/A
National Environmental Management: Waste Act	N/A	X	N/A	N/A
<b>National legislation</b>				
Mineral Petroleum Development Resources Act	X	N/A	X	N/A
National Water Act	To be confirmed		N/A	N/A
National Heritage Resources Act	N/A	X	N/A	N/A
Others: Please specify: Land Use Planning Act	N/A	X	N/A	N/A

Please provide proof of submission of applications in **Appendix 5**.

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.

## 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 (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
<p>(E.g. For prospecting - drill site, site camp, ablation 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, ablation, stores, workshops, processing plant, storm water control, berms, roads, pipelines, power lines, conveyors, etc...etc...etc.)</p>	<p>(of operation in which activity will take place). State; Planning and design, Pre-Construction' Construction, Operational, Rehabilitation, Closure, Post closure.</p>	<p>(volumes, tonnages and hectares or m<sup>2</sup>)</p>	<p>(Eg, storm water control, dust control, noise control, access control, rehabilitation etc....., etc.....)</p>	<p>(A description of how each of the recommendations herein will comply with any prescribed environmental management standards or practices that have been identified by Competent Authorities)</p>
<p><b>Year 1: Non-Invasive Prospecting</b></p> <p>Desktop Geological Study: Literature Survey / Review</p>	<p>Phase 1: Planning Phase</p>	<p>N/A: Non-invasive Prospecting</p>		
<p><b>Year 2-3: Non-Invasive Prospecting</b></p> <p>Surface Mapping</p> <p>Radon Emanometry</p>	<p>Phase 2: Planning Phase</p>	<p>N/A: Non-invasive Prospecting</p>		
<p><b>Year 4: Invasive Prospecting</b></p> <p>Target Drilling</p> <p>Infill Drilling</p> <p>(Drill site will entail Reverse Circulation (RC) and Diamond</p>	<p>Phase 3: Operational phase</p>	<p>Total of ±0.05 ha</p>	<ul style="list-style-type: none"> <li>➤ Dust suppression;</li> <li>➤ Noise management;</li> <li>➤ Waste management;</li> <li>➤ Weeds control;</li> <li>➤ Storm water management;</li> <li>➤ Traffic management.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Dust &amp; Noise: NEM:AQA, 2004</li> <li>➤ Waste: NEM:WA, 2008</li> <li>➤ Weeds: NEMBA: 2004</li> <li>➤ Storm water: NWA, 1998</li> <li>➤ Traffic: NRTA, 1996</li> </ul>

ACTIVITIES	PHASE	SIZE AND SCALE (of Disturbance)	TYPICAL MITIGATION MEASURES	COMPLIANCE WITH STANDARDS
<p>(Core) drilling methods approximately (10m x 10m) in area at a maximum of 4 sites at any given time 100 m<sup>2</sup> each. Total disturbance (±0.05 ha).</p> <p>Exploration Boreholes</p> <p>Slope, landscape and rehabilitate the affected areas.</p>				
<p><b>Year 4: Non-Invasive Prospecting:</b></p> <p>Testing and Analysis.</p>	<p>Phase 4: Planning Phase</p>	<p>N/A: Non-invasive Prospecting</p>		
<p><b>Year 5: Non-Invasive Prospecting</b></p> <p>Analytical Desktop Pre-Feasibility Study.</p> <p>Feasibility Study and Mining Right Application (if applicable).</p> <p>Feasibility Study and Mining Right Application (if applicable).</p>	<p>Phase 5: Planning Phase</p>	<p>N/A: Non-invasive Prospecting</p>		

10. CLOSURE PLAN

<p><b>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 draft basic assessment report or environmental impact reports going forward.</b></p>	
<p><b>Baseline environment</b> 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>A detailed site selection and sensitivity analysis will be conducted for the proposed project to determine the baseline environment, and whether the proposed site is in a preferred and acceptable development area.</p> <p>The assumptions to be made in the EIA documents relating to the assessment and mitigation measures proposed, will stem from site specific information gathered from the property owners, stakeholders, interested and affected parties, as well as site inspections, specialist studies and background information gathered throughout the assessment process.</p> <p>A comprehensive Environmental Management Programme (EMPr) will be developed that will have to be implemented to mitigate and minimize the impacts during the site establishment/construction and operational phases.</p>
<p><b>Closure objectives</b> Describe the closure objectives and the extent to which they will be aligned to the baseline environment</p>	<p>Upon closure of the operation the entire footprint area will be rehabilitated to allow the affected area to return to agricultural use. At this stage the following baseline closure objectives are proposed from which a detailed closure plan will be developed:</p> <ul style="list-style-type: none"> <li>➤ Rehabilitation of all the disturbed surface areas shall entail landscaping, levelling, top dressing, land preparation, seeding (if required), and weed / alien clearing.</li> <li>➤ All infrastructures, equipment, and other items used during the prospecting period will be removed from the site in accordance with section 44 of the MPRDA, 2002.</li> <li>➤ Waste material of any description, including receptacles, scrap, rubble, and tyres, will be removed entirely from the prospecting area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site.</li> <li>➤ The rehabilitation area will be cleared of weeds and invader plant species. Priority will be given to species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto).</li> <li>➤ Final rehabilitation shall be completed within a period specified by the Regional Manager.</li> </ul> <p>A site-specific rehabilitation plan drawn to a suitable scale will be provided in the EMPr to be submitted together with the EIAR.</p>
<p><b>Rehabilitation Plan</b> Describe the scale and aerial extent of the prospecting or mining listed activities to be authorized, 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><b>Rehabilitation Cost</b> Describe how the rehabilitation cost will be determined and provide a preliminary estimate thereof</p>	<p>The rehabilitation cost will be determined in accordance with the guideline document for the evaluation of the quantum of closure-related financial provision by a mine and as prescribed in terms of Regulation 54 (1) of the MPRDA. The preliminary amount for rehabilitation of the proposed site has been estimated to be in the region of ±R 100 000.</p>
<p><b>Decommissioning</b> 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 or mining activity.</p>	<p>The decommissioning activities will consist of the following:</p> <ul style="list-style-type: none"> <li>➤ Removal of all prospecting equipment from site;</li> <li>➤ Sealing and capping of all the boreholes; and</li> <li>➤ Landscaping of any/all compacted areas.</li> </ul>

	<p>Final rehabilitation of the surface area shall entail landscaping, levelling, maintenance, and clearing of invasive plant species (if applicable). All equipment, plant and other items used during the prospecting period will be removed from site (section 44 of the MPRDA, 2002). Waste material of any description will be removed entirely from the prospecting area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on the site. The management of invasive plant species will be done in a sporadic manner during the life of the activity. Species regarded as Category 1a and 1b invasive species in terms of NEM:BA (National Environmental Management: Biodiversity Act 10 of 2004 and regulations applicable thereto) will be eradicated from the site. Final rehabilitation shall be completed within a period specified by the Regional Manager.</p>
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**SIGNATURE OF APPLICANT**



\_\_\_\_\_  
Signature of the applicant / Signature on behalf of the applicant:

Solium Energy (Pty) Ltd

\_\_\_\_\_  
Name of company (if applicable):

31 January 2025

\_\_\_\_\_  
Date:

**APPENDIX 4  
DECLARATION OF THE EAP**

I, Zoe Norval, declare that –

General declaration:

- I act as the independent environmental practitioner in this application
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant
- I declare that there are no circumstances that may compromise my objectivity in performing such work;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will take into account, to the extent possible, the matters listed in regulation 8 of the Regulations when preparing the application and any report relating to the application;
- I have no, and will not engage in, conflicting interests in the undertaking of the activity;
- I undertake to disclose to the applicant and the competent authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the competent authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the competent authority;
- I will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- I will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the competent authority in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the competent authority may be attached to the report without further amendment to the report;
- I will keep a register of all interested and affected parties that participated in a public participation process; and
- I will provide the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not
- all the particulars furnished by me in this form are true and correct;
- will perform all other obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I realise that a false declaration is an offence in terms of regulation 71 of the Regulations and is punishable in terms of section 24F of the Act.

**Disclosure of Vested Interest (delete whichever is not applicable)**

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;
- ~~I have a vested interest in the proposed activity proceeding, such vested interest being:~~



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Signature of the environmental assessment practitioner:

Greenmined Environmental (Pty) Ltd

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Name of company:

31 January 2025

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Date: