13. ASSESSMENT OF EACH IDENTIFIED POTENTIALLY SIGNIFICANT IMPACT AND RISK

(This section of the report must consider all the known typical impacts of each of the prospecting activities (including those that could or should have been identified by knowledgeable persons) and not only those that were raised by registered and affected parties).

NAME OF ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	SIGNIFICANCE If not mitigated	MITIGATION TYPE	SIGNIFICANCE If mitigated
Prospecting activities	Compaction – from movement of heavy machinery	Soil	**Low** Significance Point of **28**)	∘ Existing roads and tracks will be used as far as possible. ∘ New access tracks will be kept to a minimum. ∘ Rehabilitation of disturbed areas will take place.	**Low** (Significance Point of **20**)
	∘ Contamination – from diesel, oil grease etc. used for the drilling machinery and from maintenance of machinery conducted on site ∘ Contamination – from domestic waste, sewage.		**Moderate** (Significance point of **48**)	∘ Topsoil must not be contaminated with oil, grease, diesel, etc. which may inhibit the later growth of vegetation. ∘ All chemicals, fuels and oils to be stored on site will be appropriately stored in sealed containers and placed on a lined area. ∘ Inspect equipment daily for leaks. Machinery and equipment will only be maintained over a drip tray, a thin concrete slab or a PVC lining to prevent soil and water contamination. No vehicle will be extensively repaired on site. ∘ All equipment and vehicles must be adequately maintained so that during operations it does not spill oil, diesel, fuel, etc. ∘ Any contaminated soil will be collected into non-permeable bags and disposed of at an approved landfill site. ∘ A chemical toilet will be used on site and will be used in such a way as to prevent water pollution. Full or leaking toilets must be reported to the supervisor for corrective action or replacement. ∘ Rehabilitation of disturbed areas will take place.	**Low** (Significance point of **24**)
	Loss of top soil -when digging sump	Land use	**Moderate** (Significance point of **40**)	∘ Any removed topsoil will be kept to one side and protected from being blown away or being eroded. ∘ Rehabilitation of disturbed areas will take place	**Low** (Significance Point of **20**)
	Current land use on site		**Low** (Significance point of **30**)	∘ Only one drilling site will be operational at any time. ∘ The area to be disturbed will be kept to a minimum (not exceeding 10mx10m).	**Low** (Significance point of **16**)

NAME OF ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	SIGNIFICANCE If not mitigated	MITIGATION TYPE	SIGNIFICANCE If mitigated
				◦ Drilling site will be established within 50m of any agricultural land unless consent is received from the land owner.	
	Fauna & flora currently on site	Biodiversity (fauna & flora)	**Moderate** (Significance point of **48**)	◦ Drilling and access tracks will be located in areas that will result in minimal ground disturbance. ◦ A field survey will be undertaken before establishment of each drilling site to confirm that no threatened species or ecologically sensitive areas are present in sections to be cleared. ◦ Permission will be obtained from the landowner before trees are felled, should it be necessary. ◦ All trees protected in terms of the National Forests Act, 1998, will be protected – will not be cut, disturbed, damaged, removed..	**Moderate** (Significance point of **30**)
	Potential introduction of alien & invasive species		**Moderate** (Significance point of **40**)	◦ Machinery will be cleared of mud and seeds prior to relocation to the next site to prevent the spread of alien invasive species. ◦ An inspection on whether there is evidence of alien and invasive species as a result of prospecting activities will be undertaken and removed if required.	**Low** (Significance point of **24**)
	◦ Contamination – from diesel, oil grease etc. used for the drilling machinery and from maintenance of machinery conducted on site ◦ Contamination – from domestic waste, sewage	Surface- and groundwater	**Moderate** (Significance point of **70**)	◦ The drilling fluids that will be used do not pose a water pollution threat. ◦ No drilling will be established within 100m of any watercourse or wetland. ◦ Drilling sumps will be constructed sufficiently large to retain all slurry produced during drilling. ◦ All chemicals, fuels and oils to be stored on site will be appropriately stored in sealed containers and placed on a lined area. ◦ All waste will be collected, separated and stored properly in containers with lids and removed to an approved landfill. ◦ Inspect equipment daily for leaks. Machinery and equipment will only be maintained over a drip tray, a thin concrete slab or a PVC lining to prevent soil and water contamination. No vehicle will be extensively repaired on site. ◦ All equipment and vehicles must be adequately maintained so that during operations it does not spill oil, diesel, fuel, etc.	**Moderate** (Significance point of **48**)
	Potential water discharge – from drilling.		**Moderate** (Significance point of **48**)		**Low** (Significance point of **18**)

NAME OF ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	SIGNIFICANCE If not mitigated	MITIGATION TYPE	SIGNIFICANCE If mitigated
				◦ Any contaminated soil will be collected into non-permeable bags and disposed of at an approved landfill site. ◦ A chemical toilet will be used on site and will be used in such a way as to prevent water pollution. Full or leaking toilets must be reported to the supervisor for corrective action or replacement. ◦ If any drilling meets an artesian flow, it will be permanently sealed from top to bottom to prevent surface discharge. ◦ All boreholes will be drilled and constructed in such a way as to prevent ingress of water into the hole. ◦ Any completed borehole that is not required for groundwater monitoring will be sealed to prevent groundwater contamination. ◦ Rehabilitation of disturbed areas will take place.	
	Potential water availability to other users – water for drilling may be sources on site	Surface- and groundwater	**Moderate** (Significance point of **48**)	◦ Drinking water will be supplied in plastic containers to be stored on site. ◦ If required, a water use licence may need to be applied for (Department of Water Affairs) for the abstraction of surface- and/or groundwater.	**Low** (Significance point of **24**)
	Potential heritage sites may be disturbed and/or damaged	Heritage sites	**Moderate** (Significance point of **70**)	◦ Potential heritage sites will be identified during the planning of boreholes locations and demarcated. ◦ Access to these sites will then be limited and all workers will be notified to keep at least 100m away from these sites.	**Low** (Significance point of **24**)
	Potential minimal dust may be caused	Air quality (dust)	**Low** (Significance point of **24**)	◦ All drilling machinery will be fitted with appropriate dust suppression equipment like water sprays, where possible. ◦ Speed limits on gravel roads will be limited to 40km/hr to minimise dust generation. ◦ Dust will be effectively controlled in all disturbed areas through water spraying. ◦ Excavation, handling and transportation of erodible materials should be avoided during periods of excessive wind. ◦ If necessary, other appropriate dust suppression techniques will be administered. For example	**Low** (Significance point of **16**)

NAME OF ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	SIGNIFICANCE If not mitigated	MITIGATION TYPE	SIGNIFICANCE If mitigated
				chemicals, wind fencing, covering of surfaces and vegetation of open areas.	
	Potential noise from drilling	Noise	**Low** (Significance point of **20**)	o Modern, low noise emission vehicles and equipment will be favoured. o All equipment on site will be maintained in good working order. o Drilling will be restricted to day light hours. o Speed limits on gravel roads will be limited to 40km/h to minimise noise generation.	**Low** (Significance point of **16**)

If impacts are not mitigated the average score for the Significance Point is 43. If impacts are mitigated the Significance Point decreases to 23. This means that the overall activities, if mitigated, will yield a low environmental significance

14. SUMMARY OF SPECIALIST REPORTS

(This summary must be completed if any specialist reports informed the impact assessment and final site layout process and must be in the following tabular form)

LIST OF STUDIES UNDERTAKEN	RECOMMENDATIONS OF SPECIALIST REPORTS	SPECIALIST RECOMMENDATIONS THAT HAVE BEEN INCLUDED IN THE BAR (Mark with an X where applicable)	REFERENCE TO APPLICABLE SECTION OF REPORT WHERE SPECIALIST RECOMMENDATIONS HAVE BEEN INCLUDED
To be included in the finalised study.			

15. ENVIRONMENTAL IMPACT STATEMENT

i. Summary of the key findings of the basic assessment report

In general, it is recognized that the proposed prospecting activities has the potential to pose various risks to the environment as well as to the residents or businesses in the surrounding area. After the implementation of all measures, there is no significant impact that has been identified.

ii. Final site map

(Provide a map at an appropriate scale which superimposes the proposed overall activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers).

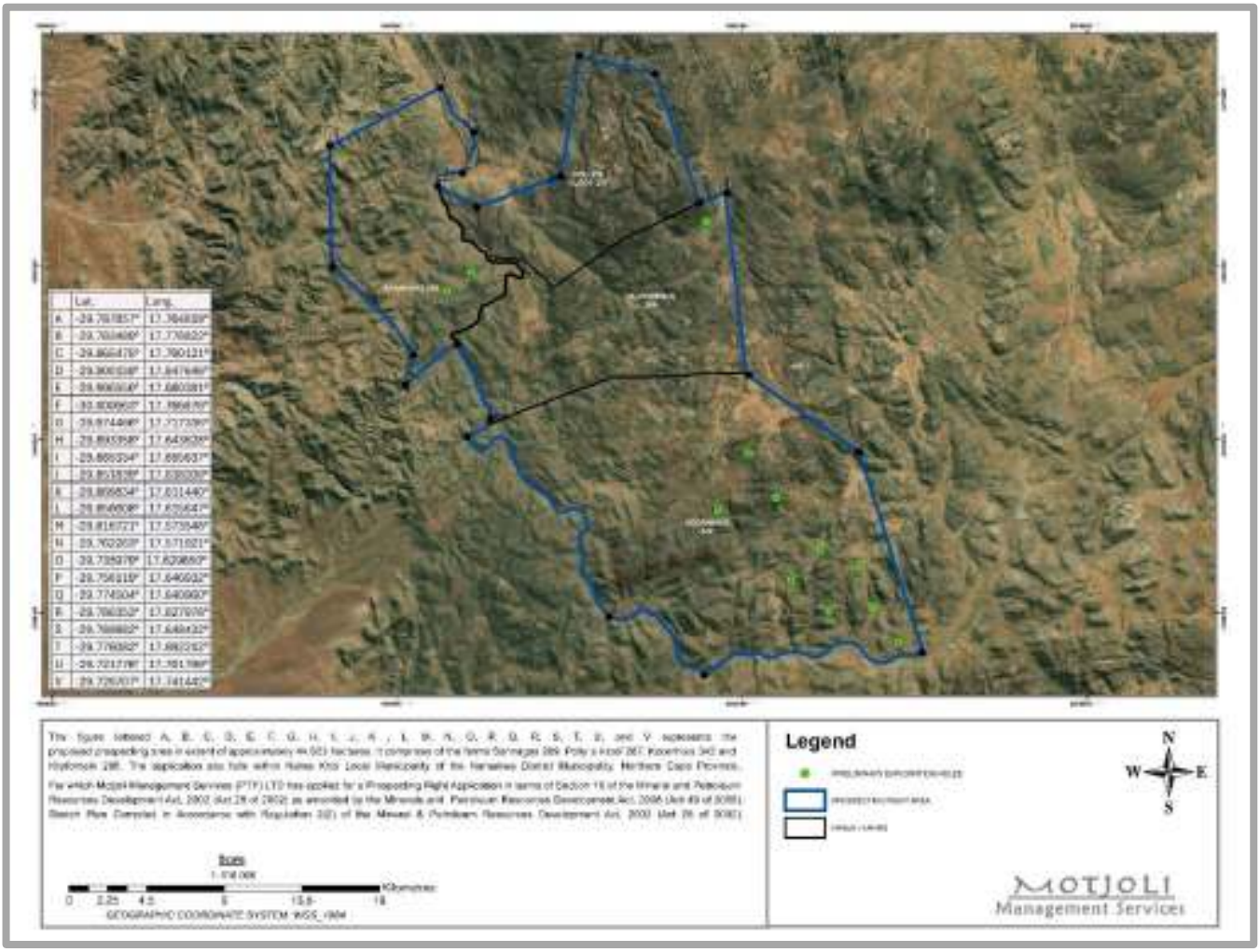

Figure A.8.: Preliminary Site Map

iii. Summary of the positive and negative impacts and risks of the proposed activity and identified alternatives;

Positive:

- The economy and society will be benefitting from future proposed prospecting activities that could lead to the development of a Mine and possible work opportunities.
- Research indicates that the rare minerals industry will experience an export demand within the next 10 years. The proposed prospecting activities which could lead to an eventual mining right application could ensure that the province of Northern Cape and South Africa will benefit from the projected growth of the rare minerals industry.

Negatives:

- Small disturbance to natural vegetation and soil profile.
- Slight increase in dust and noise in the close vicinity of each prospecting activity.

16. PROPOSED IMPACT MANAGEMENT OBJECTIVES AND THE IMPACT MANAGEMENT OUTCOMES FOR INCLUSION IN THE EMPR;

Based on the assessment and where applicable the recommendations from specialist reports, the recording of proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr as well as for inclusion as conditions of authorization.

Rehabilitation plan

The exact location and extent of the prospecting activities, including the need for construction of new access tracks, will be determined once all available information has been evaluated. It is therefore not possible to include a rehabilitation plan showing the areas and aerial extent of the prospecting activities, including the anticipated prospected area at the time of closure. The extent of the proposed prospecting activities areas is, however, shown in the final site plan.

The following environmental controls will be implemented during prospecting to aid or reduce rehabilitation:

- The environment will be returned to its original state, as far as possible. No physical infrastructure will be left on the site.
- Vegetation cleared from each drilling site will be stored within the drilling site for final rehabilitation.
- The area will be level and even, and in a natural state containing no foreign debris or other materials and to ensure ecological, hydrological and topographical integrity.
- Prospecting activities will be restricted to the designated drilling sites and agreed upon access tracks. No further disturbances will be permitted.
- Following rehabilitation, the site will blend suitably with the surrounding environment.

Rehabilitation of prospecting sites and access tracks

- Progressive rehabilitation will be undertaken during prospecting. Each prospecting site established and associated disturbed areas will be rehabilitated when drilling is completed at each prospecting site. This will be undertaken while the next prospecting site is being established to ensure that old prospecting sites are rehabilitated as soon as possible.
- All temporary equipment and facilities will be removed off site.
- Topsoil will be replaced across the disturbed area and shaped to allow a free draining surface. No ponding on the disturbed area will be allowed.

- Cleared vegetation will be used as brush-cut packing on disturbed areas after rehabilitation to prevent erosion while natural vegetation re-establishes. No alien plant material will be used for this purpose.
- In cases where native vegetation has been removed or damaged and where re-vegetation is required, species endemic to the area will be re-established.
- An inspection will be held after rehabilitation to determine alien and invasive species growth and the necessary corrective action will be implemented.
- Waste containers will be removed off site and waste will be disposed of at an approved landfill site.
- All survey pegs and flagging tape will be removed where appropriate.
- Any access roads or portions thereof, constructed for the prospecting activities and which will no longer be required by the landowner, will be rehabilitated.
- Damage to pre-existing roads will be repaired in consultation with the landowner. If backfilling is required, inert material will be imported to the site for this purpose.
- The affected area will be shaped to ensure effective drainage of storm water and to prevent ponding on site.
- Photos will be taken of each site before, during and after prospecting at fixed points to be kept on record for inspections.

Closure objectives and their extent of alignment to the pre-prospecting environment

The following closure objectives will be applicable for rehabilitation:

- Disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.
- There will be no adverse environmental effect outside the disturbed area and the affected area will be shaped to ensure effective drainage and prevent ponding on site.
- The disturbed area will not require any more maintenance than that in or on surrounding land after prospecting is completed.

If the commitments in this BAR are adhered to and rehabilitation is undertaken as described above, it is not anticipated that there will be any long-term management or maintenance required for areas disturbed during prospecting**.**

17. ASPECTS FOR INCLUSION AS CONDITIONS OF AUTHORIZATION.

Any aspects which must be made conditions of the Environmental Authorization

The following areas must be excluded from the prospecting work:

- A buffer zone of 500m from and around wetlands
- A buffer zone of 1:100 years from rivers and streams (measured from the riparian area)
- A buffer zone of 500m around dams and pans
- All conservation and other protected areas
- Steep, sloping mountainous terrain
- A buffer zone of 100m around heritage sites, including any structures older than 60 years and graves.
- A buffer zone of 100m around any residential infrastructure
- A buffer zone of 5m around any road
- The servitudes of all buried telephone lines, pipelines and other public utilities

Progressive rehabilitation should be done during prospecting activities.

18. DESCRIPTION OF ANY ASSUMPTIONS, UNCERTAINTIES AND GAPS IN KNOWLEDGE

(Which relate to the assessment and mitigation measures proposed)

Assumptions

All technical data and/or information provided by the proponent are accurate and up to date.

Environmental Hydro Solutions (Pty) Ltd and its contractors will implement the measures contained in the BAR and EMPr and that both the BAR and EMPr will be revised and updated to include requisite studies, plans, method statements and operational procedures prior to the commencement of prospecting activities.

A monitoring and evaluation system and procedures, including auditing, will be established and operationalized to track the implementation of the EMPr in order to ensure that management measures are effective and that corrective actions are undertaken to address any shortcomings and non-performance/non-compliance.

Limitations and uncertainties

- All information provided to the environmental team by the applicant and I&APs was correct and valid at the time that it has been provided.
- The strategic level investigations undertaken by specialists prior to the commencement of the BAR process, indicated that the development site is suitable and technically acceptable.
- It is not always possible to involve all I&APs individually, however every effort has been made to involve as many affected stakeholders as possible.
- The information provided by the applicant and specialists was accurate and unbiased; and
- The scope of this investigation is limited to assessing the environmental impacts associated with the construction, operation and decommissioning of the proposed prospecting activities.

19. REASONED OPINION AS TO WHETHER THE PROPOSED ACTIVITY SHOULD OR SHOULD NOT BE AUTHORIZED

i. Reasons why the activity should be authorized or not.

- The economy and society will be benefitting from future proposed prospecting activities that could lead to the development of a Mine and possible work opportunities.
- Research indicates that the rare minerals industry will experience an export demand within the next 10 years. The proposed prospecting activities which could lead to an eventual mining right application could ensure that the province of Northern Cape and South Africa will benefit from the projected growth of the rare minerals industries.

ii. Conditions that must be included in the authorization

The following areas must be excluded from the prospecting work:

- A buffer zone of 500m from and around wetlands
- A buffer zone of 1:100 years flood line from rivers and streams (measured from the riparian area)
- A buffer zone of 500m around dams and pans
- All conservation and other protected areas
- Steep, sloping mountainous terrain
- A buffer zone of 100m around heritage sites, including any structures older than 60 years and graves
- A buffer zone of 100m around any residential infrastructure
- A buffer zone of 5m around any road
- The servitudes of all buried telephone lines, pipelines and other public utilities

20. PERIOD FOR WHICH THE ENVIRONMENTAL AUTHORIZATION IS REQUIRED

The Environmental Authorization is required for the duration of 5 years later during prospecting.

21. UNDERTAKING

Confirm that the undertaking required to meet the requirements of this section is provided at the end of the EMPr and is applicable to both the Basic Assessment Report and the Environmental Management Programme report.

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises BAR and EMPr compiled in accordance with the guideline on the Departments official website and the directive in terms of sections 29 and 39 (5) in that regard, and the applicant undertakes to execute the Basic Assessment Report and Environmental Management Programme as proposed.	
Full Names and Surname	RP Colyn
EAP Registration	2020-1358

22. FINANCIAL PROVISION

State the amount that is required to both manage and rehabilitate the environment in respect of rehabilitation

i. Explain how the aforesaid amount was derived.

Template for "rule-based" approach of the quantum for financial provision

CALCULATION OF THE QUANTUM

Project: **Epang Base Minerals (Pty) Ltd** Date (Current Liability): **Feb-26**

Project: **Epang Uranium Project**

Evaluators: **Motjoli Management Services (Pty) Ltd**

Reviewers: **Environmental Hydro Solutions (Pty) Ltd**

No.	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master Rate	Multiplication Factor	Weighting Factor 1	Amount (Rands)
			Step 4.5	Step 4.3	Step 4.3	Step 4.4	
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	-	20,62	1,00	1,00	-
2 (A)	Demolition of steel buildings and structures	m2	-	287,24	1,00	1,00	-
2 (B)	Demolition of reinforced concrete buildings and structures	m2	-	423,30	1,00	1,00	-
3	Rehabilitation of access roads	m2	-	51,40	1,00	1,00	-
4 (A)	Demolition and rehabilitation of electrified railway lines	m	-	498,90	1,00	1,00	-
4 (B)	Demolition and rehabilitation of non-electrified railway lines	m	-	272,12	1,00	1,00	-
5	Demolition of housing and/or administration facilities	m2	-	574,49	1,00	1,00	-
6	Opencast rehabilitation including final voids and ramps	ha	-	292 382,79	0,52	1,00	-
7	Sealing of shafts adits and inclines	m3	-	54,20	1,00	1,00	-
8 (A)	Rehabilitation of overburden and spoils	ha	-	200 767,50	1,00	1,00	-
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	-	250 052,29	1,00	1,00	-
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	-	726 270,39	0,80	1,00	-
9	Rehabilitation of subsided areas	ha	-	168 112,55	1,00	1,00	-
10	General surface rehabilitation	ha	0,25	159 041,72	1,00	1,00	39 760,43
11	River diversions	ha	-	159 041,72	1,00	1,00	-
12	Fencing	m	-	181,42	1,00	1,00	-
13	Water management	ha	-	60 472,14	0,67	1,00	-
14	2 to 3 years of maintenance and aftercare	ha	0,25	21 165,25	1,00	1,00	5 291,31
15 (A)	Specialist study (geohydrology)	Sum	-	-	1,00	1,00	-
15 (B)	Specialist study (revegation)	Sum	-	-	1,00	1,00	-
					Sum of items 1 to 15 above		R45 051,74
1	Preliminary and General		R5 406,21		Weighting Factor 2 (Step 4.4) 1,05		R5 676,52
2	Contingencies		R4 505,17				R4 505,17
					Subtotal 2		R55 233,44
					VAT (15%)		R8 285,02
					Grand Total		**R 63 518,45**

ii. Confirm that this amount can be provided for from operating expenditure.

(Confirm that the amount is anticipated to be an operating cost and is provided for as such in the Prospecting Work Programme (PWP), Financial and Technical Competence Report or Prospecting Work Programme as the case may be).

Financial provision has been made available through the financial support as declared in PWP by Motjoli Iron Ore Company (Pty) Ltd.

The reserves provide for sufficient funds for premature and planned closure of the prospecting operation. The quantum for financial provision for rehabilitation will be re-assessed on an annual basis and arrangement to fund shortfalls will be made.

23. SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

i. Compliance with the provisions of sections 24(4)(a) and (b) read with section 24(3)(a) and (7) of the National Environmental Management Act (Act 107 of 1998). The EIA report must include the:

a) **Impact on the socio-economic conditions of any directly affected person.**

(Provide results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or rare minerals prospecting on any directly affected person including the landowner, lawful occupier, or, where applicable, potential beneficiaries of any land restitution claim, attach the investigation report (consultation report)

Given the extent of the prospecting activities, the prospecting right application activity will only employ about 4-6 people, as only drilling crew is required.

b) **Impact on any national estate referred to in section 3(2) of the National Heritage Resources Act.**

(Provide the results of investigation, assessment, and evaluation of the impact of the mining, bulk sampling or alluvial mining on any national estate referred to in section 3(2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with the exception of the national estate contemplated in section 3(2)(i)(vi) and (vii) of that Act, attach the investigation report and confirm that the applicable mitigation is reflected in herein).

The prospecting activities are minimal. No heritage site will be impacted upon as prospecting activities only entails of drilling which will impact 10m x10m only.

24. Other matters required in terms of sections 24(4)(a) and (b) of the Act.

The EAP managing the application must provide the competent authority with detailed, written proof of an investigation required by section 24(4)(b)(i) of the Act and motivation if no reasonable or feasible alternatives, as contemplated in sub-regulation 22(2)(h), exist. The EAP must attach such motivation as Appendix E).

The Environmental Authorization applied for and submitted.

PART B

ENVIRONMENTAL MANAGEMENT PROGRAMME REPORT

1. DRAFT ENVIRONMENTAL MANAGEMENT PROGRAMME.

i. Details of the EAP

(Confirm that the requirement for the provision of the details and expertise of the EAP are already included in PART A, section 1(a) herein as required).

Please Part A section (C).

ii. Description of the Aspects of the Activity

(Confirm that the requirement to describe the aspects of the activity that are covered by the draft environmental management Programme is already included in PART A, section (1)(h) herein as required).

I, RP Colyn, hereby confirm that the requirements to describe the aspects of the activity that are covered by the draft environmental management programme are already included in PART A, section 1(h) herein.

iii. Composite Map

(Provide a map **(Attached as an Appendix)** at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that any areas that should be avoided, including buffers)

Figure B.1. Final version to be included in the Final BAR after studies have been concluded.

iv. Description of Impact management objectives including management statements

a) **Determination of closure objectives.**

(Ensure that the closure objectives are informed by the type of environment described)

The following closure objectives will be applicable for rehabilitation:

- Disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.
- There will be no adverse environmental effect outside the disturbed area and the affected area will be shaped to ensure effective drainage and prevent ponding on site.
- The disturbed area will not require any more maintenance than that in or on surrounding land after prospecting is completed.

If the commitments in this EMPr are adhered to and rehabilitation is undertaken as described above, it is not anticipated that there will be any long-term management or maintenance required for areas disturbed during prospecting.

b) **Volumes and rate of water use required for the application.**

Water demand during the exploration phase will be minimal, with less than 5,000 litres required for drilling activities.

Per borehole, roughly 20 litres is required.

c) **Has a water use license been applied for?**

A General Authorisation for water use will be registered for on the e-WULAAS system, in accordance with regulatory requirements prior to the commencement of any exploration activities.

The certificate, once obtained, will be circulated to all I&APs.

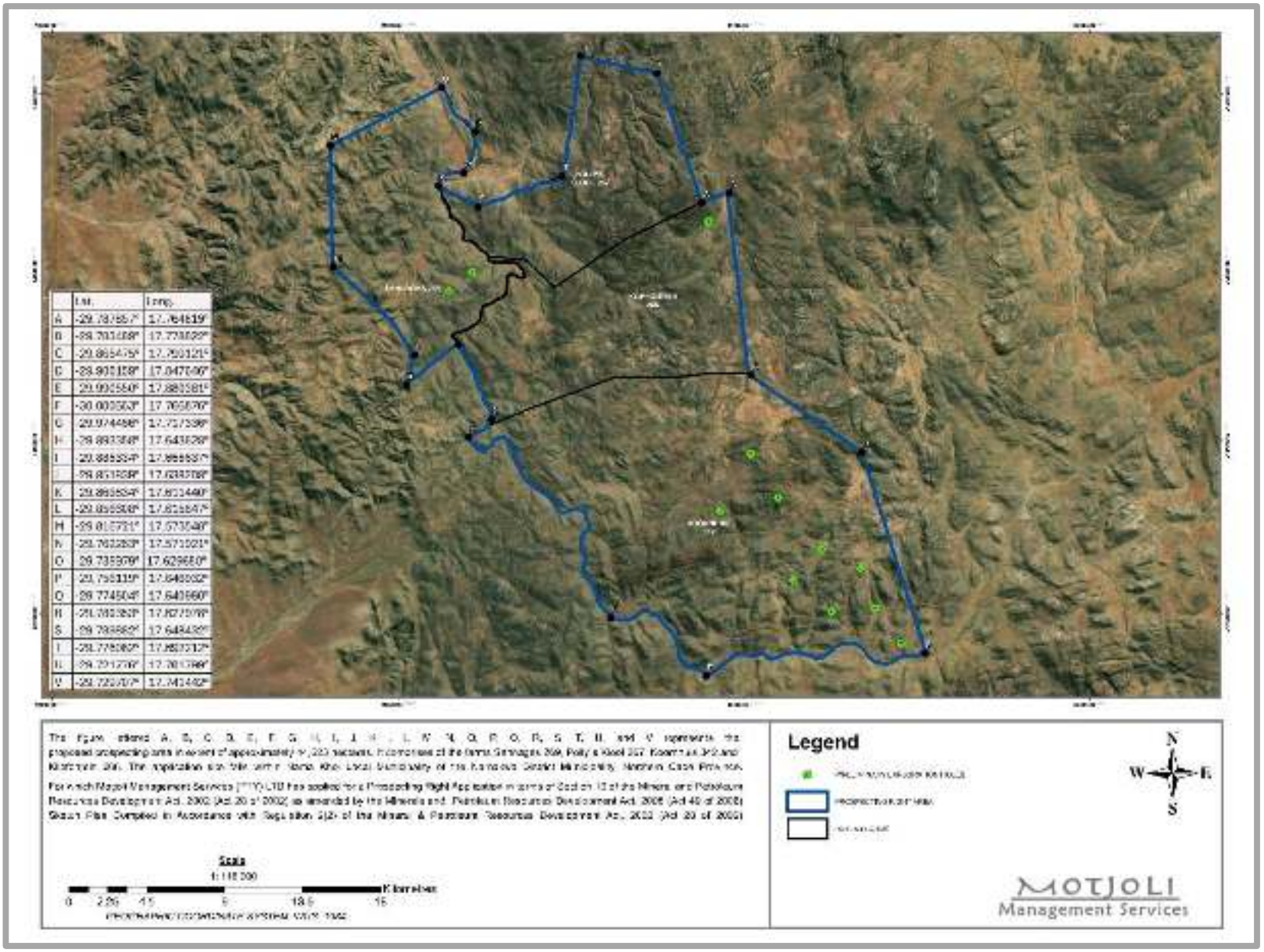

Figure B.1: Preliminary Composite Map

d) **Impacts to be mitigated in their respective phases**

Measures to rehabilitate the environment affected by the undertaking of any listed activity

ACTIVITIES	PHASE	SIZE AND SCALE of disturbance	MITIGATION MEASURES	COMPLIANCE WITH STANDARDS	TIME PERIOD FOR IMPLEMENTATIO
Prospecting Activities	Exploration Phase-Phase 2 (Drilling)	Prospecting area (Approximately 0.25 ha)	It is essential that people involved in the prospecting programme know how to respond in the event of an environmental emergency situation in order to avoid significant environmental degradation or injury to human health. Ideally, such incidents should not occur. If people involved in the prospecting programme implement all management measures outlined in this EMP, the likelihood of such incidents occurring is greatly reduced. However, despite the best intentions and the best environmental management practices, it is impossible to ensure that no incidents will ever occur during prospecting. Therefore, it is vital to ensure that all personnel are aware of the management measures to be undertaken in the event of an accident. Two major emergency incidents have been identified: o Hydrocarbon spills o The outbreak of fire Emergency incident procedures are outlined below. An Environmental Officer will be appointed to the project to manage all environmental related aspects of the prospecting programme.	All mitigation measures will be complied with as prescribed by various guidelines by the Department of Environmental Affairs and Department of Mineral and Petroleum Resources.	Rehabilitation will be continuous for the areas where prospecting has taken place. Upon completion of the prospecting Programme, all equipment will be removed from drilling sites as well as access track (if applicable) will be rehabilitated. All disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.

e) **Impact Management Outcomes**

(A description of impact management outcomes, identifying the standard of impact management required for the aspects)

ACTIVITY	POTENTIAL IMPACT	ASPECTS AFFECTED	PHASE	MITIGATION TYPE (modify, remedy, control, or stop)	STANDARD TO BE ACHIEVED
Prospecting Activities	Compaction – from movement of heavy machinery	Soil	Exploration Phase-Phase 2 (Drilling)	o Control through management and monitoring o Remedy through rehabilitation where negative impacts have been identified.	Impact kept to minimum and rehabilitate affected areas.
	o Contamination – from diesel, oil grease etc. used for the drilling machinery and from maintenance of machinery conducted on site o Contamination – from domestic waste, sewage and borehole cores				
	Loss of top soil -when establishing drilling				
	Erosion – from clearing of drilling site and movement along access tracks				
	Current land use on site	Land use			
	Fauna & flora currently on site	Biodiversity (fauna & flora)			
	Potential introduction of alien & invasive species				
	o Contamination – from diesel, oil grease etc. used for the drilling site and from maintenance of machinery conducted on site o Contamination – from domestic waste, sewage and borehole cores				
	Potential water discharge – drilling sites	Surface- and groundwater			
	Potential water availability to other users – water for drilling may be sources on site				
	Potential heritage sites may be disturbed and/or damaged	Heritage sites			
	Potential minimal dust may be caused	Air quality (dust)			
	Potential noise from drilling	Noise			

f) **Impact Management Actions**

(A description of impact management actions, identifying the manner in which the impact management objectives and outcomes contemplated in paragraphs (c) and (d) will be achieved).

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
Drilling	Dust	o Control through management and monitoring o Remedy through rehabilitation where negative impacts have been identified	Rehabilitation will be continuous for the areas where exploration has taken place. Upon completion of the prospecting programme, all equipment will be removed, drilling sites as well as access tracks (if applicable) will be rehabilitated. All disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use	If any dust is created, the amount and severity will be measured and managed against the South African National Standards (SANS) no 1929 of 2005 "Ambient air quality – Limits for common pollutants". This standard gives limit values for common pollutants to ensure that the negative effects of such pollutants on human health are prevented or reduced. Other relevant legislations and guidelines possibly applicable include the National Environmental Management Act: Air Quality Act (Act 39 of 2004), Schedule 2 and SANS no 69 of 2004 "Framework for setting and implementing national ambient air quality standards' as well as Mining and Biodiversity Guidelines, 2013.
	Noise			If noise disturbance (up until unacceptable levels) do occur, the amount and severity will be measured and managed against the following guidelines and legislation: o The South African National Standards (SANS) 10328:2003: Methods for Environmental Noise Impact Assessments; o SANS 10103:2008: The Measurement and Rating of Environmental Noise (with respect to Land Use, Health, Annoyance and Speech Communication); and o National Noise Control Regulations. o Mining and Biodiversity Guidelines, 2013.
	Surface water contamination			Water quality guidelines must be measured against the South African Water Quality Guidelines as set out by the Department of Water Affairs such as the "Minimum Requirements for Monitoring at Waste Management Facilities". Other applicable guidelines include the Mining and Biodiversity Guidelines, 2013.
	Groundwater contamination			
	Soil disturbance			The rehabilitation of soils, where disturbed, should be conducted in such a manner that the highest possible agricultural potential (or what the previous land use was) is attained after prospecting, with regards to the "Guidelines for the rehabilitation of mined land. Draft for review by the steering committee, 14 Feb 2007" as drawn up by Phil Tanner (Chamber of Mines of South Africa / Coaltech 2013) or

ACTIVITY	POTENTIAL IMPACT	MITIGATION TYPE	TIME PERIOD FOR IMPLEMENTATION	COMPLIANCE WITH STANDARDS
				any more updated revisions of the document or Mining and Biodiversity Guidelines, 2013.
	Contamination and disturbance of biodiversity (fauna & flora)			If any areas associated with the prospecting areas be identified as an ecosystem requiring protection and management in terms of biodiversity in future (e.g. wetlands not destroyed by prospecting and related activities) a Biodiversity Management Plan in terms of Sections 43 to 45 of the National Environmental Biodiversity Act (Act 10 of 2004) may be needed. The Biodiversity Management Plan will also have to take into account the Northern Cape Province Biodiversity Conservation Assessment (Desmet, Schaller & Skowna, 2009), , Environment and Rural Development.
	Heritage sites			If needed, the National Heritage Resources Act (NHRA) (Act 25 of 1999) should be consulted as well as the guidelines set out by the South African National Heritage Resources Agency (SAHRA). If needed, permits must be acquired by from SAHRA before a heritage site (including graves and cemeteries) can be affected or destroyed during development activities.

2. FINANCIAL PROVISION

a) Determination of the amount of Financial Provision.

i. Describe the closure objectives and the extent to which they have been aligned to the baseline environment described under the Regulation

The following closure objectives will be applicable for rehabilitation:

- Disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.
- There will be no adverse environmental effect outside the disturbed area and the affected area will be shaped to ensure effective drainage and prevent ponding on site.
- The disturbed area will not require any more maintenance than that in or on surrounding land after borehole is completed.

If the commitments in this EMP are adhered to and rehabilitation is undertaken as described above, it is not anticipated that there will be any long-term management or maintenance required for areas disturbed during prospecting.

ii. Confirm specifically that the environmental objectives in relation to closure have been consulted with landowner and interested and affected parties.

Public meeting will be held with the community and landowners before the commencement of any exploration activities,.

iii. Provide a rehabilitation plan that describes and shows the scale and aerial extent of the main Prospecting activities, including the anticipated prospecting area at the time of closure.

Rehabilitation of Boreholes

- Boreholes that will not be used for groundwater monitoring or abstraction will be sealed.
- Boreholes that have intersected an aquifer and will not be used by the landowner for groundwater abstraction require special attention if there is likelihood that these boreholes will be intersected later during prospecting. Such Boreholes must be sealed with a concrete plug at least immediately above and immediately below the aquifer. For the purpose of rehabilitation, water strikes will be recorded during the prospecting programme.

Rehabilitation of drilling sites

- Progressive rehabilitation will be undertaken during drilling. Each drilling site and associated disturbed areas will be rehabilitated when borehole is completed at each drilling site.
- Cleared vegetation will be used as brush-cut packing on the disturbed areas after rehabilitation to prevent erosion while natural vegetation re-establishes. NO alien plant material will be used for this purpose.
- In cases where native vegetation has been removed or damaged and where re-vegetation is required, species endemic to the area will be re-established.
- An inspection will be held after rehabilitation to determine alien and invasive species growth and the necessary corrective action will be implemented.

Closure objectives and their extent of alignment to the pre-prospecting environment

The following closure objectives will be applicable for rehabilitation:

- Disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.
- There will be no adverse environmental effect outside the disturbed area and the affected area will be shaped to ensure effective drainage and prevent ponding on site.
- The disturbed area will not require any more maintenance than that in or on surrounding land after prospecting is completed.

If the commitments in this BAR are adhered to and rehabilitation is undertaken as described above, it is not anticipated that there will be any long-term management or maintenance required for areas disturbed during prospecting.

iv. Explain why it can be confirmed that the rehabilitation plan is compatible with the closure objectives.

As described in Section i (1), all disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.

The following closure objectives will be applicable for rehabilitation:

- Disturbed land will be rehabilitated to a stable and permanent form suitable for subsequent land use.
- There will be no adverse environmental effect outside the disturbed area and the affected area will be shaped to ensure effective drainage and prevent ponding on site.
- The disturbed area will not require any more maintenance than that in or on surrounding land after borehole is completed.

If the commitments in this EMPr are adhered to and rehabilitation is undertaken as described above, it is not anticipated that there will be any long-term management or maintenance required for areas disturbed during prospecting. Thus, the rehabilitation plan is compatible with the closure objectives.

v. Calculate and state the quantum of the financial provision required to manage and rehabilitate the environment in accordance with applicable guideline.

Template for "rule-based" approach of the quantum for financial provision

CALCULATION OF THE QUANTUM

Project: **Epang Base Minerals (Pty) Ltd** Date (Current Liability): **Feb-26**

Project: **Epang Uranium Project**

Evaluators: **Motjoli Management Services (Pty) Ltd**

Reviewers: **Environmental Hydrological Solutions (Pty) Ltd**

No.	Description	Unit	A	B	C	D	E=A*B*C*D
			Quantity	Master Rate	Multiplication Factor	Weighting Factor 1	Amount (Rands)
			Step 4.5	Step 4.3	Step 4.3	Step 4.4	
1	Dismantling of processing plant and related structures (including overland conveyors and powerlines)	m3	-	20,62	1,00	1,00	-
2 (A)	Demolition of steel buildings and structures	m2	-	287,24	1,00	1,00	-
2 (B)	Demolition of reinforced concrete buildings and structures	m2	-	423,30	1,00	1,00	-
3	Rehabilitation of access roads	m2	-	51,40	1,00	1,00	-
4 (A)	Demolition and rehabilitation of electrified railway lines	m	-	498,90	1,00	1,00	-
4 (B)	Demolition and rehabilitation of non-electrified railway lines	m	-	272,12	1,00	1,00	-
5	Demolition of housing and/or administration facilities	m2	-	574,49	1,00	1,00	-
6	Opencast rehabilitation including final voids and ramps	ha	-	292 382,79	0,52	1,00	-
7	Sealing of shafts adits and inclines	m3	-	54,20	1,00	1,00	-
8 (A)	Rehabilitation of overburden and spoils	ha	-	200 767,50	1,00	1,00	-
8 (B)	Rehabilitation of processing waste deposits and evaporation ponds (non-polluting potential)	ha	-	250 052,29	1,00	1,00	-
8 (C)	Rehabilitation of processing waste deposits and evaporation ponds (polluting potential)	ha	-	726 270,39	0,80	1,00	-
9	Rehabilitation of subsided areas	ha	-	168 112,55	1,00	1,00	-
10	General surface rehabilitation	ha	0,25	159 041,72	1,00	1,00	39 760,43
11	River diversions	ha	-	159 041,72	1,00	1,00	-
12	Fencing	m	-	181,42	1,00	1,00	-
13	Water management	ha	-	60 472,14	0,67	1,00	-
14	2 to 3 years of maintenance and aftercare	ha	0,25	21 165,25	1,00	1,00	5 291,31
15 (A)	Specialist study (geohydrology)	Sum	-	-	1,00	1,00	-
15 (B)	Specialist study (revegetation)	Sum	-	-	1,00	1,00	-
					Sum of items 1 to 15 above		R45 051,74
1	Preliminary and General		R5 406,21		Weighting Factor 2 (Step 4.4) 1,05		R5 676,52
2	Contingencies		R4 505,17				R4 505,17
					Subtotal 2		R55 233,44
					VAT (15%)		R8 285,02
					Grand Total		**R 63 518,45**

vi. Confirm that the financial provision will be provided as determined.

Financial provision has been made available through the financial support as declared in PWP by Motjoli Iron Ore Company (Pty) Ltd.

The reserves provide for sufficient funds for premature and planned closure of the prospecting operation. The quantum for financial provision for rehabilitation will be re-assessed on an annual basis and arrangement to fund shortfalls will be made.

3. MECHANISMS FOR MONITORING COMPLIANCE WITH AND PERFORMANCE ASSESSMENT AGAINST THE ENVIRONMENTAL MANAGEMENT PROGRAMME AND REPORTING THEREON, INCLUDING:

- Monitoring of Impact Management Actions
- Monitoring and reporting frequency
- Responsible persons
- Time period for implementing impact management actions
- Mechanism for monitoring compliance

SOURCE ACTIVITY	IMPACTS REQUIRING MONITORING PROGRAMMES	FUNCTIONAL REQUIREMENTS FOR MONITORING	ROLES AND RESPONSIBILITIES	MONITORING AND REPORTING FREQUENCY AND TIME PERIODS FOR IMPLEMENTING IMPACT MANAGEMENT ACTIONS
Check compliance with all conditions of EMP	All potential impacts from prospecting activities.	Rectify non-compliances immediately.	Environmental Officer	Monthly
Upstream and downstream of surface water quality if prospecting near the non-perennial stream on site		EC, pH and TDS will be recorded upstream and downstream using handheld monitoring equipment. If the water quality at the downstream sampling point deteriorates, a water sample will be collected upstream and downstream and sent to an accredited laboratory to be tested to confirm the deterioration. The source of deterioration must be identified, and corrective action taken.	Environmental Officer	Weekly
Visual inspection for signs of erosion		Rectify non-compliances immediately.	Environmental Officer	Weekly
Check rehabilitation of disturbed areas		Rectify non-compliances immediately. Clear any alien and invasive plant species.	Environmental Officer	Monthly
Check for proper waste management practices and that no waste is visible on site		Rectify non-compliances immediately.	Environmental Officer	Weekly
Evidence of spills and leaks		Rectify non-compliances immediately.	Supervisor and Environmental Officer	Daily
Complaints from residents regarding noise and dust		Rectify non-compliances immediately.	Supervisor	When necessary
Inspection of fire-fighting equipment		Rectify non-compliances and replace faulty tools immediately.	Supervisor	Weekly
Health and safety monitoring of personnel		Monitoring of exposure to noise and dust during the prospecting programme.	Supervisor	Every 3 months

4. INDICATE THE FREQUENCY OF THE SUBMISSION OF THE PERFORMANCE ASSESSMENT/ENVIRONMENTAL AUDIT REPORT.

The BAR and EMPr will be audited by an independent party on an annual basis to determine the level of compliance. The results of this audit will be used to improve environmental management procedures, where required. The audit report will also be submitted to the Department of Mineral and Petroleum Resources (DMPR) upon completion.

5. ENVIRONMENTAL AWARENESS PLAN

a) Manner in which the applicant intends to inform his or her employees of any environmental risk which may result from their work.

Induction (including environmental awareness) training will be conducted on all people involved in the prospecting programme, including geologists, drilling crew and relevant technical services, prior to the commencement of any work; according to the relevant legislation, Epang Base Minerals (Pty) Ltd Standard Operational Procedures (SOPs) and this EMP. Epang will do in-house training, should it be necessary to its personnel on site.

b) Manner in which risks will be dealt with in order to avoid pollution or the degradation of the environment.

i. **Description of solutions to risks**

(Describe the manner in which the risk must be dealt with in order to avoid pollution or degradation of the environment)

It is essential that people involved in the prospecting programme know how to respond in the event of an environmental emergency situation in order to avoid significant environmental degradation or injury to human health. Ideally such incidents should not occur. If people involved in the prospecting programme implement all management measures outlined in this EMPr, the likelihood of such incidents occurring is greatly reduced. However, despite the best intentions and the best environmental management practices, it is impossible to ensure that no incidents will ever occur during prospecting. Therefore, it is vital to ensure that all personnel are aware of the management measures to be undertaken in the event of an accident.

Two major emergency incidents have been identified:

- Hydrocarbon spills
- The outbreak of fire

Emergency incident procedures are outlined below. An Environmental Officer will be appointed to the project to manage all environmental related aspects of the prospecting programme.

Emergency planning

- The site and all people involved in the prospecting programme are to be managed in strict accordance with the Occupational Health and Safety Act (Act No. 85 of 1993).
- Potentially hazardous areas are to be cordoned off and clearly marked at all times.
- No unauthorised firearms are permitted on site.
- Adequate emergency facilities (e.g. first aid kit) must be provided for the treatment of an emergency on site.
- Emergency contact numbers are to be displayed conspicuously.
- Necessary Personal Protective Equipment (PPE) and safety gear appropriate to the task being undertaken is to be provided to all personnel working on site (e.g. hard hats, safety boots, ear plugs, masks, etc.).

- All vehicles and equipment used on site must be operated by appropriately trained and/or licensed individuals in compliance with all safety measures.

Management of fire risks

- Each prospecting site will be cleared of vegetation.
- "No Smoking" signs must be prominently displayed.
- No fires allowed.
- No burning of refuse or vegetation is permitted.
- Fire equipment must be easily accessible.
- Fire equipment must be serviced, full and in good working order.

Management of spills

- Ensure that a proper spill-kit is available on site. The kit must include absorptive material that can handle all forms of hydrocarbon.
- Ensure that any hydrocarbon spills are cleaned up as soon as possible.
- At least one person on site must receive formal training in the use of the spill control kit.
- Equipment is to be required immediately upon developing leaks.
- A drip tray, a thin concrete slab or a PVC lining shall be used to prevent soil and water contamination.
- All spills on site must be reported to the Environmental Officer.
- Spread absorbent sand on areas where oil spills have occurred. Oil-contaminated soils are to be removed to a contained storage area and disposed of appropriately.
- Non-degradable waste must be collected and disposed of at a registered waste site.

Incident reporting

- The supervisor on site must take corrective action to mitigate an incident appropriate to the nature and scale of the incident, immediately after the occurrence of the incident.
- Residual environmental damage that remains after having taken corrective action must be rehabilitated.
- Change operating procedures where necessary to prevent recurrence of similar incident.
- All incidents must be recorded in an Environmental Incident Report, within 24 hours of the incident occurring. Additional documents, including photos must be appended to the incident report to provide a comprehensive record of the incident and the corrective and preventative action taken.
- All incidents will be investigated in collaboration with the Environmental Officer. The focus of these investigations shall not be to apportion blame to specific employees, but to ascertain the root cause of the incident and to prevent a recurrence of similar incidents.

ii. **Environmental awareness training**

(Describe the general environmental awareness training and training on dealing with emergency situations and remediation measures for such emergencies).

A number of key elements must be addressed during an environmental awareness training session, since it is recognised that the majority of employees are generally not informed about the environment. The following key elements must be addressed:

- An explanation of the basic key concepts;
- The importance of the environment, including the management thereof;
- Examples of environmental degradation;
- The role that the employees have in protecting the environment;
- Examples of pollution;

- Simple, easy-to-follow rules to protect the environment; and
- South African laws which protect the environment.

All people involved in the prospecting programme must receive environmental awareness training, to ensure that they are aware of their responsibilities and are competent to carry out their work in an environmentally acceptable manner. The training must also contain all relevant sections of the EMP and must be presented in a clear, understandable manner. Relevant sections of the EMP include:

- Access, including use of roads, tracks, gates, etc.;
- Control measures required to manage excluded and exempted areas;
- The handling, storage and disposal of waste;
- Emergency response procedures;
- Control of alien and invasive plant species;
- Fire prevention;
- Sediment and erosion control;
- Control measures to be implemented with regards to the management of water, noise and dust; and
- Rehabilitation of prospecting sites and access tracks.

This training may take the form of a PowerPoint presentation, information posters or pamphlets, and other easily accessible methods of information communication.

6. SPECIFIC INFORMATION REQUIRED BY THE COMPETENT AUTHORITY

(Among others, confirm that the financial provision will be reviewed annually).

The BAR and EMPr will be audited by an independent party on an annual basis to determine the level of compliance. The results of this audit will be used to improve environmental management procedures, where required. The audit report will also be submitted to the Department of Mineral and Petroleum Resources (DMPR) upon completion.

7. UNDERTAKING

The EAP herewith confirms;

a) The correctness of the information provided in the reports

b) The inclusion of comments and inputs from stakeholders and I&Aps , inputs and recommendations from specialist reports where relevant ; and will be in the final BAR.

Herewith I, the person whose name and identity number is stated below, confirm that I am the person authorised to act as representative of the applicant in terms of the resolution submitted with the application, and confirm that the above report comprises BAR and EMPr compiled in accordance with the guideline on the Departments official website and the directive in terms of sections 29 and 39 (5) in that regard, and the applicant undertakes to execute the Basic Assessment Report and Environmental Management Programme as proposed.	
Full Names and Surname	RP Colyn
EAP Registration	2020-1358

- END-

APPENDIX A

BACKGROUND INFORMATION DOCUMENT

BACKGROUND INFORMATION DOCUMENT

Prospecting Right Application for Epang Base Minerals (Pty) Ltd

Department of Mineral and Petroleum Resources Reference Numbers:

NC 30/5/1/1/2/14777 PR

NC 30/5/1/1/2/14778 PR

NC 30/5/1/1/2/14779 PR

Compiled by:

MOTJOLI
MANAGEMENT SERVICES

INTRODUCTION

Epang Base Minerals (Pty) Ltd ("the proponent") submitted a prospecting right applications to prospect for Lithium (Li), Tantalum (Ta), Niobium (Nb), Rare Earth Elements (REE), Uranium (U), and associated minerals typical of LCT and NYF pegmatite systems. The prospecting right area is on the farms:

NC 30/5/1/1/2/14777 PR	NC 30/5/1/1/2/14778 PR	NC 30/5/1/1/2/14779 PR
Sonnegus 269, Polly's Kloof 267, Boomhuis 342, Kliptontein 266	Mesklip 259, Farm 629, Farm 261, Namaras 256, Draay 346	Aasvoëlkrans 262 Beesfontein 218, Windhoek 264, Waterhoek 636, Waterhoek 252, Vogelklip 265, Speelhoek 253, Ou Hoek 263, Farm 260, Droogedamp 255, Droogedap 258, Deur Drift 219, Dunselkraal 217 (Portions RE, RE 2, 3 and 5).

The Prospecting Right Application Area is located approximately 2 kilometres south of the Town Springbok in the Northern Cape Province (Figure 1). It falls within Nama Khoi Local Municipality of the Namakwa District Municipality and covers an area of approximately 1 810.327 hectares.

Prospecting activities entails of non-invasive field and invasive activities (Figure 2 – 4). These activities trigger Activity 20 of GNR 325 of the NEMA Regulation (listing notice 2 as amended in April 2017), and Activity 12 (i) of GNR 324 (listing notice 3 as amended in April 2017), which requires a Basic Assessment Report.

Environmental Hydro Solutions (Pty) Ltd was appointed by Epang Base Minerals (Pty) Ltd as the consultant to conduct the public participation process for the prospecting right application.

Purpose of this Background Information Document

The purpose of this document is to:

- Notify potential stakeholders of the prospecting right application.
- Provide background information regarding the proposed activity.
- Invite potential stakeholders to register themselves as Interested & Affected Parties (I&APs) and to raise issues of importance, share their input, comments and/or concerns regarding the proposed development.

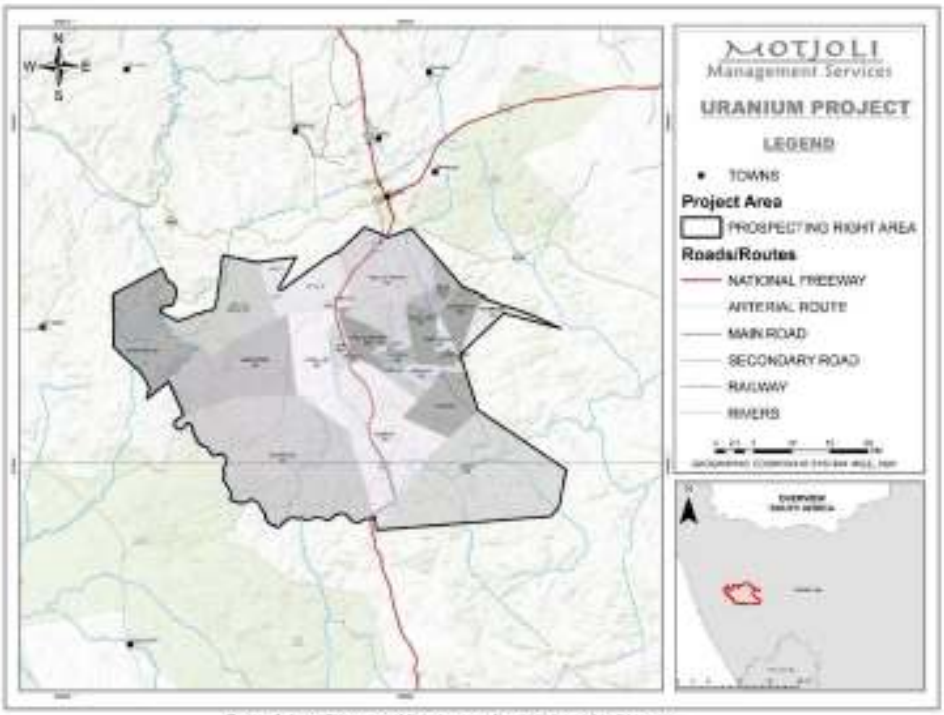

Figure 1: Locality map of the prospecting right application area

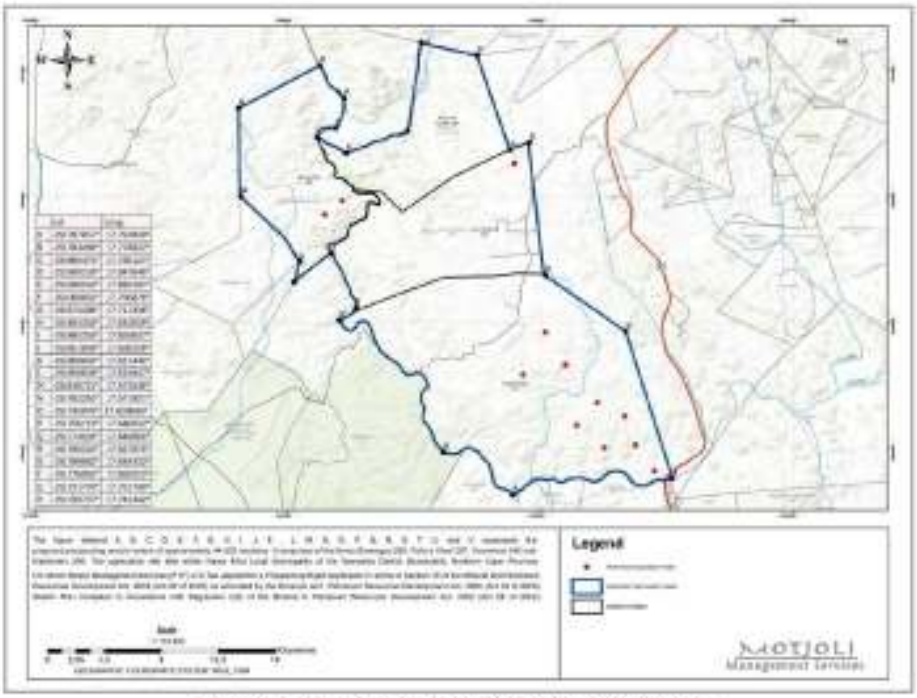

Figure 2: Contemplated Plan for Exploration Sites NC 30/5/1/1/2/14777 PR

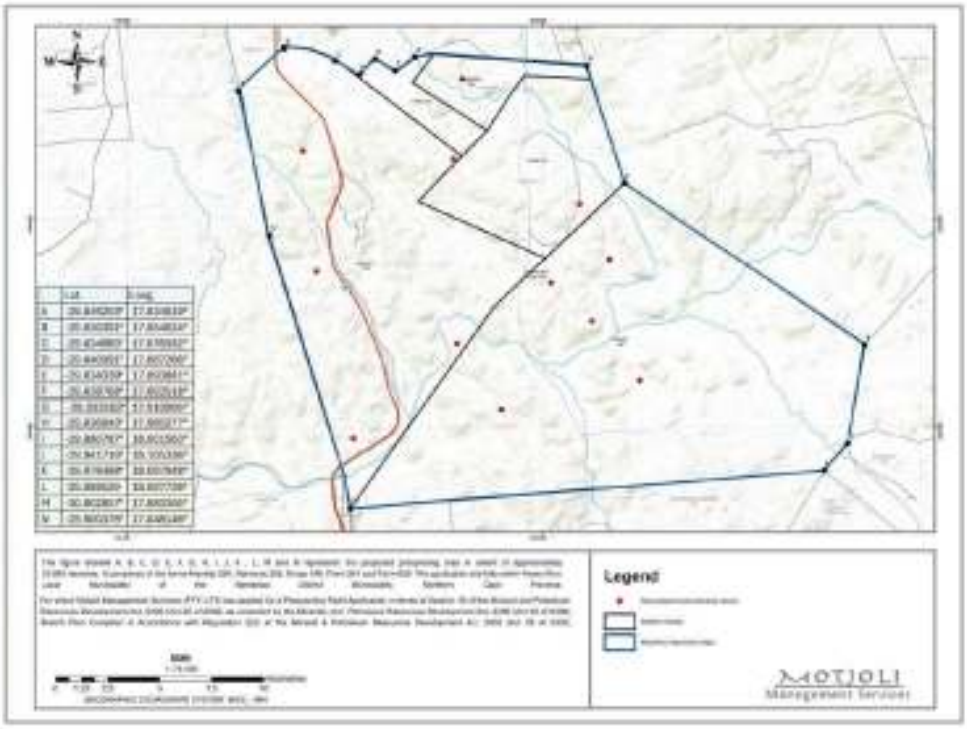

Figure 3: Contemplated Plan for Exploration Sites NC 30/5/1/1/2/14778 PR

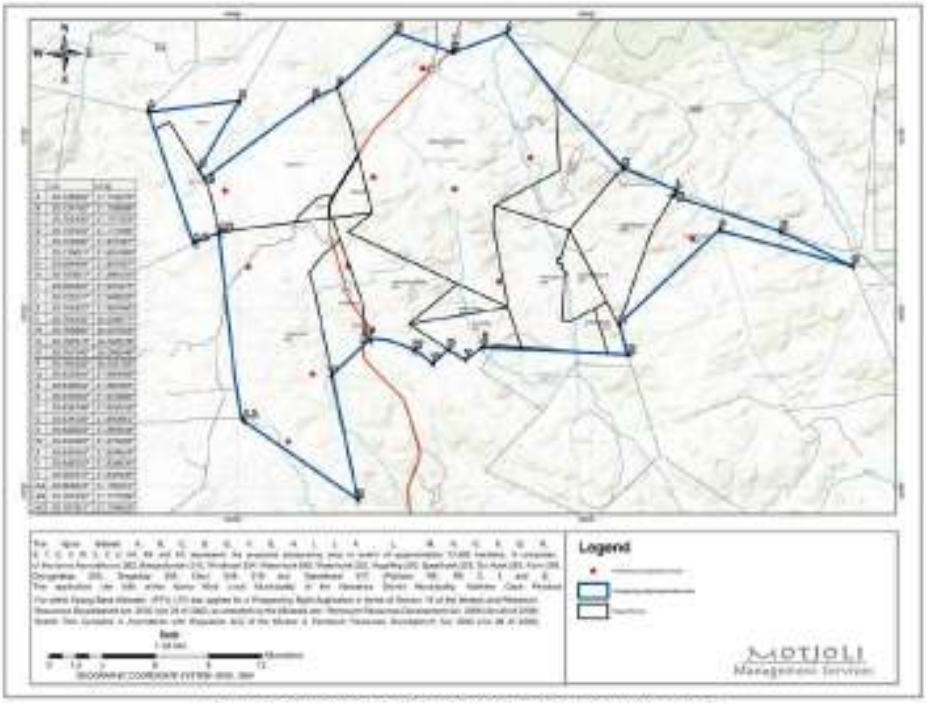

Figure 4: Contemplated Plan for Exploration Sites NC 30/5/1/1/2/14779 PR

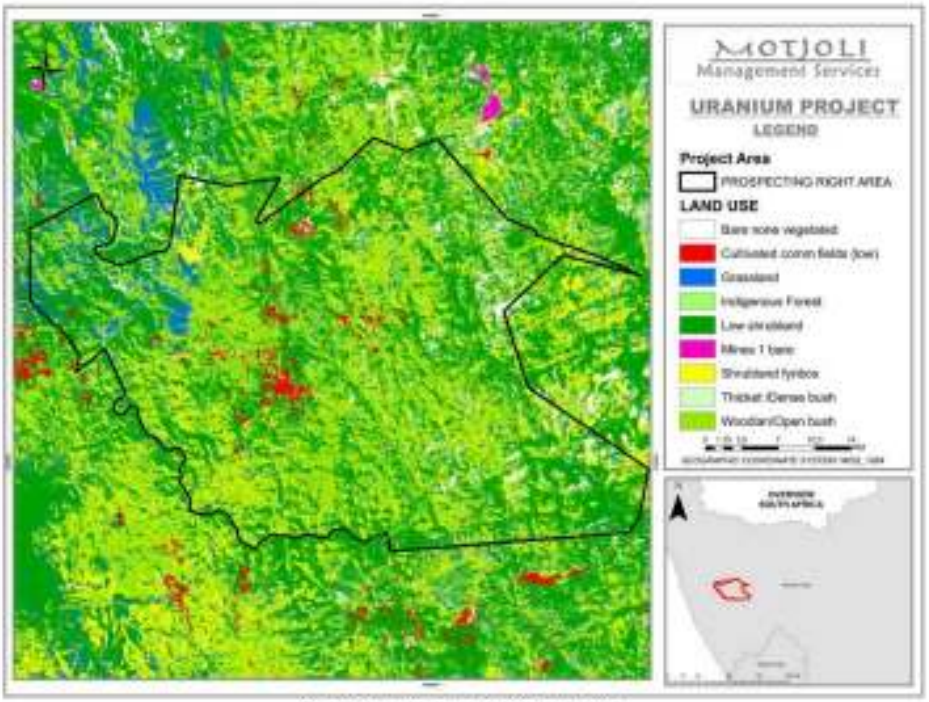

Figure 5: Land use map of the prospecting area

INFORMATION REGARDING THE PROPOSED PROSPECTING ACTIVITIES

Overall Project Description:

Prospecting will take place over a 5 year period and will comprise non invasive methods (e.g. desktop study and geological mapping) as well as invasive methods (e.g. core drilling) divided into 5 phases.

Proposed Prospecting Activities:

Prospecting activities will commence immediately after the prospecting right has been granted to Epang. A total of 36 holes will be drilled for the project. The different phases associated with the Prospecting Work Programme are listed below and described in detail.

Exploration

Five phases are planned in the Prospecting Work Program although Epang will target the completion of the prospecting program in less time than the planned five years, if possible. If for any unforeseen reason the prospecting period takes longer than expected, the applicant will inform the Department of Mineral and Petroleum Resources in writing and to request an extension of the prospecting period, which is five years.

If results are positive and a feasibility study completed the applicant will then immediately submit an application for a mining right.

Phases

The prospecting program to investigate the presence and quantities of the deposits will be conducted in 5 phases (year 1 to 5).

Phase 1 (Months 1–12):

The first phase focuses on early-stage prospecting through desktop-based and field investigations. Activities include desktop studies and GIS analysis, compilation of existing geological data, and fieldwork involving geological mapping. This information is then analysed and compiled into a formal report. The main requirement for this phase is a geologist, who will interpret the data and produce geological maps and a technical report. The outcome is a foundational understanding of the area's geology to guide further exploration.

Phase 2 (Months 12–24):

The second phase advances into physical exploration through diamond drilling and sampling. Drill cores are collected and analysed to obtain detailed subsurface information. Data from drilling is compiled, interpreted, and reported on. This phase requires both a drilling contractor and a geologist to oversee operations and interpret results. The outputs include drill core data, analytical results, updated geological plans and sections, and a comprehensive exploration report, providing a clearer picture of the mineral potential.

Phase 3 (Months 24–36):

In this phase, the focus shifts to modelling and resource estimation. A 3D geological model is developed using the data gathered in earlier phases, followed by the estimation of mineral resources. Reporting consolidates these findings into a formal technical document. This phase requires a multidisciplinary team, including a geologist, engineer, and an economist. The outcome is a quantified mineral resource estimate and a technical report supporting the viability of the deposit.

Phase 4 (Months 36–48):

Phase four centres on evaluating how the resource can be mined and processed. Activities include additional sampling, metallurgical test work to determine metal recovery rates, and preliminary geotechnical studies to assess ground stability. This phase requires a geologist, engineer, and metallurgist. The results include detailed reports on metal recovery and geotechnical conditions, which are critical for determining mining methods and processing options.

Phase 5 (Months 48–60).

The final phase involves a scoping study to assess the overall technical and economic viability of the project. It integrates all previous findings into a high-level evaluation of potential mining operations. This phase requires input from a geologist, engineers, an economist, and a metallurgist. The main output is a technical report that outlines whether the project is feasible and worth advancing to more detailed feasibility studies.

A preliminary Social and Labour Plan (SLP) and application for a mining right can be compiled and submitted.

COMMENT REQUIRED FROM I&APS ON THE BASIC ASSESSMENT REPORT (BAR)

I&APs are required to raise issues of importance, share their input, comments and/or concerns to inform the BAR. The draft BAR will be made available for review. I&APs need to take note of the following in the EMP and provide comment thereon:

Description of the existing status of the environment (including cultural, socio-economic and biophysical):

- Inform the description of the existing status of the environment
- Agree with the description of the existing status of the environment

Anticipated environmental, social or cultural impacts:

- Inform the list of potential impacts
- Agree with the list of potential impacts

Land use and development:

- List and describe any land developments that are in progress and may be affected by the prospecting

Environmental objectives:

- Inform the environmental objectives in relation to closure
- Agree with the environmental objectives in relation to closure

TIMEFRAME TO BE FOLLOWED

The timeframe for the prospecting right application is relatively short.

Document	Submit to DMPR	Date of submission
BAR (including further results of consultation)	Submit 90 days after acceptance of application	30 days after receiving BAR

All comments from I&APs need to reach Environmental Hydo Solution 30 days after receiving of BAR. The Draft BAR excluding specialist studies will be available on request from the 10th of April 2026.

A finalised BAR including comments and/or concerns raised and all specialist studies, will also be made available to all registered I&APs.

Timeframes are guided by legislation and we ask that you adhere to these as far as possible

REGISTERING AS AN INTERESTED AND AFFECTED PARTY

You can register as an I&AP by contacting Environmental Hydro Solutions by phone and e-mail.

All I&APs are invited to also identify other parties they feel should be notified regarding this prospecting right application or to share this information document with them. Please notify Environmental Hydro Solutions of any other party you feel should be included in the contact database as we need to contact them directly.

I&APs are invited to participate and share their input, concerns, comments and/or suggestions on the proposed application. Please note that the process is structured according to specific timeframes and we kindly request that you keep to the specified timeframes, which will be communicated to all registered I&APs. Input received will be included in the Basic Assessment Report (BAR) as well as a report on the results of consultation.

Who are Interested and Affected Parties (I&APs)?

Any person, company or authority that will be directly or indirectly affected by the proposed prospecting activity can register as an I&AP.

This includes, but is not limited to, landowners, tenants, municipal and provincial authorities, interest groups and conservation groups. The stakeholder database is compiled through networking and advertising.

THE ROLE OF THE I&AP

As an I&AP your role includes:

- Providing your view on the existing cultural, socio economic or biophysical environment;
- Making suggestions on alternatives and means of preventing, minimising and managing negative impacts and enhancing project benefits;
- Assisting in or commenting on the environmental objectives in relation to rehabilitation;
- Contributing local and traditional knowledge; and
- Verifying that your issues have been considered.

DRAFT OF BASIC ASSESSMENT REPORT (BAR)

The draft Basic Assessment Report will be available from the 10 April 2026. This will be sent to all interested and affected parties who registered. A finalised BAR including comments and/or concerns, will also be made available to all registered I&APs.

A finalised BAR including comments and/or concerns raised and all specialist studies, will also be made available to all registered I&APs.

Please do not hesitate to contact us should you require any further information or have any queries. Once the BAR is finalised it will be sent to all the registered interested and affected parties. Kindly send all communication to both below mentioned email addresses.

Environmental Hydro Solutions contact details:

Werner Rieker	:	083 258 2463
Noluthando Mtaba	:	065 919 2575
	:	wernerriekert@gmail.com | thando@motjolims.co.za

Prospecting Right Application: Epang Base Minerals (Pty) Ltd

Interested & Affected Party Registration & Comment Sheet

Please receive my input regarding the prospecting right application to prospect for Lithium (Li), Tantalum (Ta), Niobium (Nb), Rare Earth Elements (REE), Uranium (U), on the following farms:

NC 30/5/1/1/2/14777 PR	NC 30/5/1/1/2/14778 PR	NC 30/5/1/1/2/14779 PR
Samagas 269, Polly's Kloof 267, Koornhuis 342, Klipfontein 266	Mesklip 259, Farm 629, Farm 261, Namoras 256, Draay 346	Aasvoëlkrans 262, Biesjesfontein 218, Windhoek 264, Waterhoek 636, Waterhoek 252, Vogelklip 265, Spoelhoek 253, Ou Hoek 263, Farm 260, Droogedoop 255, Drogedoo 258, Deur Drift 219, Dansekraal 217 (Portions RE, RE 2, 3 and 5).

I want to be registered as an Interested & Affected Party:

- ☐ **Yes**
- ☐ **No**

Comments/ Concerns/ Questions

I have the following questions, comments and/or concerns:

Personal Details

Full Name:

Affiliation (e.g. Company/ Farm Owner/ Community):

Farm Portion:

Cell phone No.:

E-mail Address:

Postal Address:

--- ---

Signature: **Date**

Please send the completed form back to **Environmental Hydro Solutions.**

THANK YOU

Epang Uranium Project
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