

**UPDATED ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE RENEWAL OF ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC):**

**THE MINING OF SEMI-PRECIOUS STONES ON MINING CLAIMS NO. 71032, 71033 & 71034 SITUATED AT KAMANJAB, OUTJO DISTRICT IN THE KUNENE REGION**



**MEFT Application No.:**

**APP-003412**

**Document Version:**

**Final for Submission**

**Prepared for/Proponent:**

**Mr. Gerson V. Uaroua**

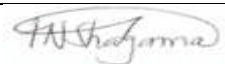
**P O Box 527 Okahandja, Namibia**

**March 2022**

**DOCUMENT INFORMATION**

Title: Environmental Clearance Certificate (ECC) **Renewal** for the Mining of Semi-Precious Stones on Mining Claims No. 71032, 71033 & 71034 situated at Kamanjab, Outjo District in the Kunene Region

**Prepared by:**

<b>Author:</b>	<b>Fredrika N. Shagama (Hydrogeologist &amp; Environmental Consultant / EAP*)</b>
<b>Qualifications:</b>	<p><b>PhD. Student: Civil Engineering (Geotechnics &amp; Hydrogeology)</b>, VSB - Technical University of Ostrava, Czech Republic</p> <p><b>MSc. Geological Engineering</b> (<i>cum laude</i>) with primary focus in Hydrogeology, VSB - Technical University of Ostrava, Czech Republic</p> <p><b>BSc. Geological Engineering</b>, VSB - Technical University of Ostrava, Czech Republic</p>
<b>Professional Affiliations:</b>	<p>International Association of Hydrogeologists (IAH) - Full (online) Member, Membership No.139790</p> <p>Namibian Hydrogeological Association (NHA) – Member</p> <p>Environmental Assessment Professionals of Namibia (EAPAN) - Ordinary Member Practitioner (Membership No. 183)</p>
<b>Contact Details:</b>	<p>Mobile: +264 81 407 5536</p> <p>Email: <a href="mailto:fshagama@gmail.com">fshagama@gmail.com</a></p> <p>Postal Address: P. O. Box 27318 Windhoek, Namibia</p>
<b>Signature:</b>	
<b>Date:</b>	07 March 2022

**EAP\* - Environmental Assessment Practitioner**

## EXECUTIVE SUMMARY

Mr. Gerson V. Uaroua or the Proponent intends to carry out mining activities of semi-precious stones on three Mining Claims (MCs) No. 71032, 71033 and 71034) located about 75km northwest of Kamanjab in the Outjo District, Kunene Region. The three MCs cover a total surface area of 53.095 hectares (ha), with MC71032 covering 17.7378 ha, MC71033 covering 17.541 and 17.8162 ha for MC71034. Both Mining Claims have potential for semi-precious stones.

The mining of any resource is one of the listed activities in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007 that may not be undertaken without an Environmental Clearance Certificate (ECC) and that the ECC needs to be renewed every three years. The activities that are relevant to the mining activities (planned project) are as follows:

- *“Listed Activity 3.1 The construction of facilities for any process or activities which requires a license, right of other forms of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Mining Act, 1992).*
- *Listed Activity 3.2 other forms of mining or extraction of any natural resources whether regulated by law or not.*
- *Listed Activity 3.3 Resource extraction, manipulation, conservation, and related activities.*

**The current ECC was issued on the 11<sup>th</sup> of March 2019 and expiring in March 2022. Therefore, an application for renewal is required.**

Therefore, for the project to remain compliant with the environmental legislation and ensure sustainability, a new ECC should be applied for, submitted to the Competent Authority (Ministry of Mines and Energy (MME)) and an ECC Renewal Report (updated Environmental Management Plan (EMP) Report) submitted to the Regulatory Authority (Department of Environmental Affairs and Forestry (DEAF) at the Ministry of Environment, Forestry and Tourism (MEFT)). The ECC Renewal Application was compiled and submitted to the MME in January 2022.

To ensure a continued compliance with the EMA and its 2012 EIA Regulations, the Proponent appointed Serja Hydrogeo-Environmental Consultants cc, independent Environmental Assessment Practitioners (the Environmental Consultants) to apply for the ECC renewal. The main renewal application include compilation of and submission of ECC Renewal Application, and compilation of the ECC Renewal Report.

The ECC Renewal Report would include information of what may have changed between the date of ECC issuance to date. This will also entail the confirmation of the implementation of the environmental management and mitigation measures recommended as part of the initial project Environmental Management Plan (EMP) under which the current ECC was issued. The final ECC Renewal Report is then submitted to the environmental custodian/regulatory authority, which is the MEFT for ECC renewal consideration.

**The Potential Key Impacts identified:**

The main potential impacts identified are as follows:

**Potential Positive Impact:**

- Socio-Economic impact job creations to the few people in the community.
- Royalties paid to the MME.

**Potential Negative Impacts:**

- Physical soil disturbance
- Biodiversity,
- Air Quality,
- Health & safety,
- Waste generation (general, sewage and wastewater),
- Noise, and Archaeology.

**RECOMMENDATIONS AND CONCLUSIONS**

The planned activities on the Mining Claims 71032-71034 are of small-scale level and activities will be well limited within the MCs' boundaries only. Although the current ECC was issued in March 2019, there has not been actual work done on site by the Proponent due to the lack of financial and technical resources. It had been difficult sourcing funds between 2020 and 2021 because of COVID-19 that hit most businesses and organizations. The Proponent has been doing his best to source start-up funds to commence with the mining activities, hence, the need to renew the ECC before it expires.

Therefore, Serja Consultants is confident that the potential negative impacts associated with the project activities will be managed and mitigated by effectively implementing the recommended management action measures. It is therefore, recommended that the Mining of Semi-Precious Stones on Mining Claims No. 71032, 71033 & 71034 situated at Kamanjab, Outjo District in the Kunene Region should be granted a new Environmental Clearance Certificate, provided that:

- All the respective management (mitigation) measures provided in this EMP are effectively implemented and monitored as stipulated to achieve full EMP implementation compliance.
- All required permits, licenses, approvals, and document renewals that may be required for the project activities in future are obtained as required.
- The Proponent and all their project workers, contractors and or specialists comply with the legal requirements governing their project and its associated activities.
- All the necessary environmental and social (occupational health and safety) precautions provided are adhered to.
- **The next EMP Compliance check (Bi-Annual Monitoring)** should be done in September 2022, which will see progress reporting on the current and activities. The monitoring exercise can be undertaken either by the project ECO, or an independently appointed Environmental Assessment Practitioner (Environmental Consultant). An Environmental Audit/Compliance/Bi-Annual Report shall be compiled for every monitoring and submitted to the DEAF at the Ministry of Environment, Forestry and Tourism for archiving (via the ECC Online Portal under the valid ECC details). This would make the next ECC Renewal easier because of an in-between track record of monitoring progress prior to the expiry date of the valid ECC.

## Conclusions

The Environmental Consultant recommends that the ECC be renewed so that the Proponent can commence with the project activities.

There have not been any activities done by the Proponent on site, pending sufficient start-up capital and technology. Therefore, the Environmental Consultant believes that the Proponent will comply with the legal requirements and commit towards environmental sustainability and renew the ECC on time again.

**Therefore, it is crucial for the Proponent, their workers, contractors and or specialists to continue with the effective implementation of the recommended management measures to protect both the biophysical and social environment. The aim would be to promote sustainable and safe development while ensuring a smooth and harmonious existence and purpose of the project activities in the host environment.**

**TABLE OF CONTENTS**

<b>DOCUMENT INFORMATION</b> .....	i
<b>EXECUTIVE SUMMARY</b> .....	ii
<b>TABLE OF CONTENTS</b> .....	v
<b>LIST OF FIGURES</b> .....	vi
<b>LIST OF TABLES</b> .....	vi
<b>APPENDICES</b> .....	vi
<b>LIST OF ABBREVIATIONS</b> .....	vi
<b>1 INTRODUCTION</b> .....	1
1.1 Project Background and Location .....	1
1.2 The Need for Environmental Clearance Certificate (ECC) .....	2
1.3 The Purpose of this ECC Renewal Report .....	3
1.4 The Local Environmental View.....	4
<b>2 DESCRIPTION OF CURRENT PROJECT ACTIVITIES</b> .....	7
2.1 Current Operational and Maintenance Activities.....	7
2.1.1 Services Infrastructures and Resources .....	7
2.2 Key potential impacts associated with the project Activities .....	8
<b>3 LEGAL FRAMEWORK: PERMITTING AND LICENSES</b> .....	9
3.1 Environmental Management Act No. 7 of 2007 .....	9
3.2 Minerals (Mining & Prospecting) Act No. 33 of 1992 .....	10
<b>4 EMP IMPLEMENTATION ROLES AND RESPONSIBILITIES</b> .....	13
4.1 The Proponent (Mr. Gerson Uaroua) .....	14
4.2 Environmental Control Officer (ECO) or Environmental Consultant .....	15
4.3 Project Staff (Workers).....	15
<b>5 ENVIRONMENTAL MANAGEMENT ACTION PLANS</b> .....	16
5.1 Previously Identified Potential Adverse Environmental Impacts .....	16
5.2 Updated Environmental and Social Management Measures (If Any) .....	28
<b>6 ENVIRONMENTAL MONITORING, COMPLIANCE AND AUDITING</b> .....	28
6.1 Implementation, Monitoring of EMP Implementation and ECC Renewal .....	28
6.2 Environmental Awareness .....	29
<b>7 RECOMMENDATIONS AND CONCLUSIONS</b> .....	29
7.1 Recommendations .....	29
7.2 Conclusions.....	30

**LIST OF FIGURES**

Figure 1: Locality Map of Mining Claims 71032, 71033 and 71034 in the Kunene Region ..... 1  
 Figure 2: The geology influenced soils within and around the MCs..... 4  
 Figure 3: The typical vegetation within and around the Mining Claims 71032, 71033 & 71034 ..... 5  
 Figure 4: Rock units of observed during the site walkover on some areas of the Mining Claims ..... 6

**LIST OF TABLES**

Table 1: GPS coordinates of the three Mining Claims ..... 2  
 Table 2: List of applicable legislation where required, permits or licenses for the mining activities on the three Mining Claims ..... 10  
 Table 3: Environmental and Social Management and Mitigation Measures for the planned mining activities on the three Mining Claims ..... 17

**APPENDICES**

**Appendix A:** The Copy of the old Environmental Clearance Certificate (ECC) issued in 2019

**Appendix B:** Date Stamped Copy of the ECC Renewal Application submitted to the Ministry of Mines and Energy (Competent Authority) and uploaded on the ECC Portal.

**LIST OF ABBREVIATIONS**

ABBREVIATION	MEANING
DEAF	Department of Environmental Affairs and Forestry
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EMA and EMP	Environmental Management Act and Environmental Management Plan
GN and GG	Government Notice and Government Gazette
MCs	Mining Claims
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
PPE	Personal Protective Equipment

# 1 INTRODUCTION

## 1.1 Project Background and Location

Mr. Gerson V. Uaroua or the Proponent intends to carry out mining activities of semi-precious stones on three Mining Claims (MCs) No. 71032, 71033 and 71034) located about 75km northwest of Kamanjab in the Outjo District, Kunene Region – **Figure 1**. The three MCs cover a total surface area of 53.095 hectares (ha), with MC No. 71032 covering 17.7378 ha, MC No. 71033 covering 17.541 and 17.8162 ha for MC No. 71034. Both Mining Claims have potential for semi-precious stones.

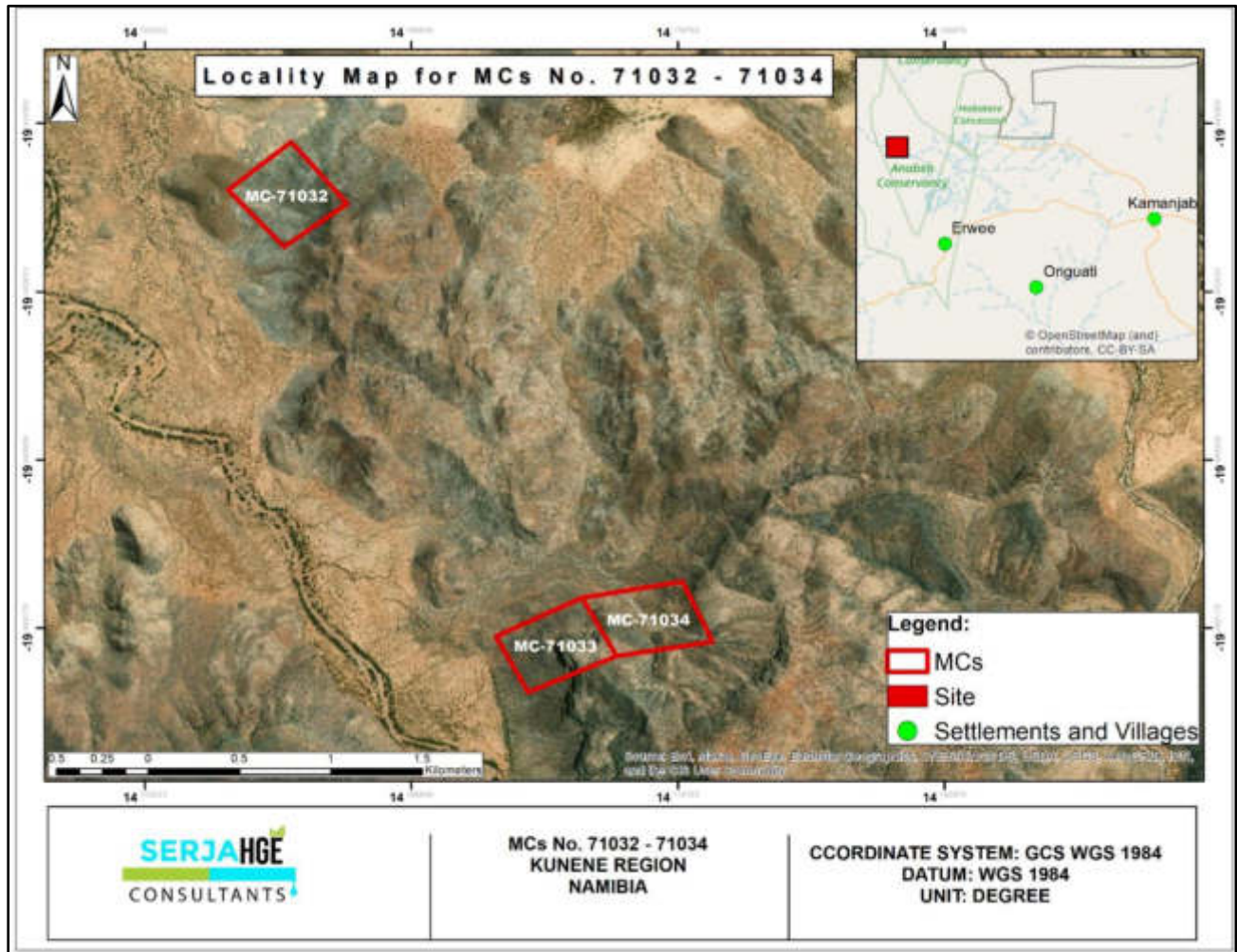


Figure 1: Locality Map of Mining Claims 71032, 71033 and 71034 in the Kunene Region

The estimated GPS coordinates of the three MCs are presented in **Table 1**.



Table 1: GPS coordinates of the three Mining Claims

Mining Claim No.	GPS Coordinates
71032	19°26'0.51"S 14°9'0.28"E
	19°26'0.43"S 14°9'0.39"E
	19°26'0.54"S 14°9'0.49"E
	19°27'0.02"S 14°9'0.37"E
71033	19°28'0.11"S 14°10'0.15"E
	19°28'0.04"S 14°10'0.30"E
	19°28'0.14"S 14°10'0.36"E
	19°28'0.20"S 14°10'0.21"E
71034	19°28'0.04"S 14°10'0.30"E
	19°28'0.01"S 14°10'0.48"E
	19°28'0.11"S 14°10'0.53"E
	19°28'0.14"S 14°10'0.36"E

## 1.2 The Need for Environmental Clearance Certificate (ECC)

Mining of any resource is one of the listed activities in the Environmental Impact Assessment (EIA) Regulations (2012) of the Environmental Management Act (EMA) No. 7 of 2007 that may not be undertaken without an Environmental Clearance Certificate (ECC) and that the ECC needs to be renewed every three years. The activities that are relevant to the mining activities (planned project) are as follows:

- "Listed Activity 3.1 *The construction of facilities for any process or activities which requires a license, right of other forms of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Mining Act, 1992).*
- *Listed Activity 3.2 other forms of mining or extraction of any natural resources whether regulated by law or not.*
- *Listed Activity 3.3 Resource extraction, manipulation, conservation, and related activities.*

**The current ECC was issued on the 11<sup>th</sup> of March 2019 (Appendix A) and expires on the 10<sup>th</sup> of March 2022. Therefore, an application for renewal is required.**

The renewal application is then submitted to the Ministry of Mines and Energy (MME) and an ECC Report (updated Environmental Management Plan (EMP) Report) submitted to the Department of Environmental Affairs and Forestry (DEAF) at the Ministry of Environment, Forestry and Tourism (MEFT) for consideration of the new ECC.

Therefore, for the project to remain compliant with the environmental legislation and ensure sustainability, a new ECC should be applied for, submitted to the Competent Authority (Ministry of Mines and Energy (MME)) and an ECC Renewal Report (updated Environmental Management Plan (EMP) Report) submitted to the Regulatory Authority (Department of Environmental Affairs and Forestry (DEAF) at the Ministry of Environment, Forestry and Tourism (MEFT)). The ECC Renewal Application was compiled and submitted to the MME on the 07<sup>th</sup> of March 2022. The date stamped copy of the ECC Renewal application is attached hereto as **Appendix B**.

To ensure a continued compliance with the EMA and its 2012 EIA Regulations, the Proponent appointed Serja Hydrogeo-Environmental Consultants cc, independent Environmental Assessment Practitioners (the Environmental Consultants) to apply for the ECC renewal. The main renewal application include compilation of and submission of ECC Renewal Application, and compilation of the ECC Renewal Report.

The ECC Renewal Report would include information of what may have changed between the date of ECC issuance to date. This will also entail the confirmation of the implementation of the environmental management and mitigation measures recommended as part of the initial project Environmental Management Plan (EMP) under which the current ECC was issued. The final ECC Renewal Report is then submitted to the environmental custodian/regulatory authority, which is the MEFT for ECC renewal consideration.

### **1.3 The Purpose of this ECC Renewal Report**

This Report has been compiled to inform the Ministry of Environment, Forestry and Tourism (MEFT) of what has happened at the Mining Claims since the issuance of the current ECC to date to enable the renewal of the ECC that was issued in March 2019. The aim is also to report on the progress of actual work done on site, implementation of the environmental management and mitigation measures of potential adverse impacts identified. The Report is also aimed at indicating whether there have been any new changes that may have arisen between the date of the ECC issuance to date.

For the project to remain compliant with the environmental legislation and ensure sustainability, a new ECC should be applied for by submitting it to the Ministry of Mines and Energy (MME) as the project competent authority. The ECC Renewal Report (updated Environmental Management Plan (EMP)) is submitted to the Environmental Commissioner at the Department of Environmental Affairs and Forestry (DEAF) at MEFT for evaluation and consideration of renewing the ECC.

The purpose of renewing an ECC is to ensure that the project activities are undertaken in an environmentally friendly and sustainable manner. This is done by the effective implementations of environmental management and mitigation measures recommended in the EMP document to minimize the adverse identified impacts while maximizing the positive impacts. Not only by the mere implementation of these measures on site throughout the project life cycle.

It is for this reason that Mr. G.V. Uaroua Serja Consultants, independent Environmental Consultants to undertake the necessary tasks for his ECC Renewal by compiling an application and this Report as well as the submission of the ECC Renewal application and Report to the competent and regulatory authority, respectively.

Based on the Proponent's information, the short description of the project activities is presented under the next chapter.

#### 1.4 The Local Environmental View

A site walkover was done on some areas of the mining claims in February 2022 to observe the status of the environment. The environmental status of the mining claims' area mainly observed were in terms of soils, vegetation, and rock outcrops.

The soils are heavily influenced by the geology (physical weathering of site rock units), and it is mainly gravel and sand in some places - **Figure 2**. Since the site walkover was done in February when it was still raining, the site soils and are covered by visibly green grass sparsely distributed on the ground, rocky hills, outcrops and in the small streams.



Figure 2: The geology influenced soils within and around the MCs

The typical or common vegetation at the project site (mining claims) are shrubs of mopane (*Colophospermum mopane*) as shown below (**Figure 3**).



**Figure 3: The typical vegetation within and around the Mining Claims 71032, 71033 & 71034**

**In terms of rock outcrops (geology):** according to the Namibia Mining Cadastre Portal, the geology of Mining Claim No. 71032 is mainly characterized by the Namibian Formation (comprising quartzite, schists, and marble) and the Kheisian Formation comprising basalt, limestone, and gneiss rock units.

Similarly, MC No. 71033 and 71034 bordering each other are also characterized by the Namibian geological Formation, with the half northerly-westerly part of the MCs overlain by dolomite, limestone, and shale. The other half (easterly-southerly part) of the MCs is overlain by quartzite, schists, and marble.

The common rock units encountered on the visited site areas (Mining Claims) were schists, shales, and dolomites - **Figure 4**.





Figure 4: Rock units of observed during the site walkover on some areas of the Mining Claims

## 2 DESCRIPTION OF CURRENT PROJECT ACTIVITIES

The actual mining activities are yet to commence on the Mining Claims as soon as the start-up financial assistance applications are approved. The brief description of project activities is presented below.

### 2.1 Current Operational and Maintenance Activities

The summary of the project description or the activities planned project activities (description) to be conducted on the Mining Claims are as follows:

- The Clearing of targeted spots within the Mining Claims to make space for setting up the small mining equipment (the clearing referred to herein does not include vegetation because vegetation onsite is sparse hence no need to cut them down/remove them).
- The Mining of semi-precious stones such as Amethyst, Calcite, Quartz, Smoky Quartz, Diopase, Crystal etc.) using a handheld Jack Hammer.
- The site works will be done by four people. The mining activities will be carried from 07h00 in the morning to 17h00, excluding weekends. However, depending on the demand, some work may be done on certain Saturdays.
- The working sites will be equipped with 40 liters of portable water daily to ensure that the workers stay hydrated throughout the day given the heat experienced in this part of the country during hot summers.
- For environmental and personal hygiene purposes, one portable chemical toilet will be required onsite (Mining Claims).
- General waste collecting bins will be provided at every mining site on the Mining Claims to ensure that the waste is handled and disposed of responsibly (in Kamanjab).
- The mined stones will be sold to potential established buyers in Opuwo, Karibib and Windhoek.

#### 2.1.1 Services Infrastructures and Resources

The equipment required for mining will include: one petrol Generator (7 Watts), one Handheld Electrical Jack hammer, one Standard Hammer, two Wheelbarrows, two spades, one portable chemical toilet for hygiene purposes, three 20 Liter containers of Petroleum Products (Petrol) and one 1000-litre water storage tank.

- **Water:** The water required for the project is primarily for domestic and clean/potable minimally for site operations such as basic cleaning. There will be 40 liters of portable water daily to ensure that the workers stay hydrated throughout the day given the heat experienced in this part of the country during hot summers. The water will be sourced from two villages, namely, Arizona, and Outokotora as well as the nearby Rest Camp, upon reaching purchasing and supply agreements. The supplied water will be stored on site in a 1000-litre tank and refilled as deemed necessary.
- **Power supply:** the power required on site such as powering the jack hammers will be provided by a small petrol-powered generator.
- **Fuel:** There will be three 20 Liter containers of Petroleum Products (Petrol) to fuel the mining associated equipment (generator).
- **Sanitation:** The site will be provided with one portable chemical toilet for hygiene purposes. Therefore, no fixed/permanent sewerage systems will be erected on site. The toilet system will be regularly transported and emptied for treatment at the nearest wastewater treatment facility.
- **Solid (general) waste:** The waste generated at the site is minimal. This waste will be sorted in different waste bins on site and transported to Kamanjab waste dumping site once the waste containers reach capacity.
- **Site accessibility:** From the C40, C35 and other main roads, the Mining Claims are accessed by local gravel and single-track access roads.
- **Workers and accommodation** - given magnitude of the project (small-scale), the starting number of workers on the Mining Claims will be four people from the community. The aim will be to generate some income through this work and make that small difference in the community through the sales of mined stones.

No onsite accommodation will be required because the workers will be commuting from their homes, daily.

- **Health and safety:** All project workers will be well equipped with personal protective equipment (PPE) while performing tasks on site. The required starting up Personal Protective Equipment (PPE) will include safety overalls, hard hats pairs of hand gloves, of safety boots, safety glasses and dust masks. One first aid kit will be on site and two of the workers will be equipped with first aid administering skills.
- **Accidental Fire management:** There will be one fire extinguisher on site.

## 2.2 Key potential impacts associated with the project Activities

The main potential impacts identified are as follows:

**Potential Positive Impact:**

- Socio-Economic impact job creations to the few people in the community.
- Royalties paid to the MME.

**Potential Negative Impacts:**

- Physical soil disturbance
- Biodiversity,
- Air Quality,
- Health & safety,
- Waste generation (general, sewage and wastewater),
- Noise, and Archaeology.

The following chapter presents the national and international legal requirements that are applicable and relevant to project.

### **3 LEGAL FRAMEWORK: PERMITTING AND LICENSES**

The project's activities are undertaken in a biophysical and social environment. These activities or some of them may even at minimum impact some of these environmental components. It is therefore necessary to consider the legislations and legal requirements governing the project and its associated activities.

#### **3.1 Environmental Management Act No. 7 of 2007**

The Environmental Management Act No.7 of 2007 and its 2012 EIA Regulations aims to ensure that the potential impacts of the development on the environment are considered carefully and in good time; that all interested and affected parties have a chance to participate in the environmental assessments and that the findings of the environmental assessments are fully considered before any decisions are made about activities which might affect the environment.

The Act aims at promoting sustainable management of the environment and use of natural resources. The Environmental Management Act (EMA) is broad; it regulates land use development through environmental clearance certification and/or Environmental Impact Assessments. The Act provides for the clearance certification for "***mining and quarrying activities***".



### 3.2 Minerals (Mining & Prospecting) Act No. 33 of 1992

The most applicable Sections to the project are as follows:

- Section 52 requires mineral license holders to enter into a written agreement with affected landowners before exercising rights conferred upon the license holder.
- Section 52(1) mineral licence holder may not exercise his/her rights in any town or village, on or in a proclaimed road, land utilised for cultivation, within 100m of any water resource (borehole, dam, spring, drinking trough etc.) and boreholes, or no operations in municipal areas, etc.), which should individually be checked to ensure compliance.
- Section 54 requires written notice to be submitted to the Mining Commissioner if the holder of a mineral license intends to abandon the mineral license area.
- Section 68 stipulates that an application for a mineral license shall contain the particulars of the condition of, and any existing damage to, the environment in the area to which the application relates and an estimate of the effect which the proposed prospecting operations may have on the environment and the proposed steps to be taken to prevent or minimize any such effect.
- Section 91 requires that rehabilitation measures should be included in an application for a mineral license.

**Implication for the proposed project:** The Proponent should carry out an assessment of the impact on the receiving environment. The Proponent should include as part of their application for the mining claims, measures by which they will rehabilitate the areas where they intend to carry out mining activities.

The Proponent should ensure that all necessary permits/authorization **for the Mining Claims (including timely renewals and required reports)** are obtained from and submitted to the MME.

Contact person and details at the MME (Mining Commissioner)

Mr. Erasmus Shivolo

Tel: +264 61 284 8167

For this Report, **Table 2** presents the information on the legal obligations (legislations, policies, and guidelines) in terms of legislation, **where permitting and/or licensing that may be required from different applicable regulatory authorities as a requirement to the ECC.**

**Table 2: List of applicable legislation where required, permits or licenses for the mining activities on the three Mining Claims**

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
<p>Environmental Management Act EMA (No 7 of 2007)</p> <p>Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878)</p> <p><b>Regulated under the Ministry of Environment, Forestry and Tourism</b></p>	<p>Requires that projects with significant environmental impacts are subject to an environmental assessment process (Section 27).</p> <p>The details principles which are to guide all EAs.</p>	<p>The EMA and its regulations should inform and guide this EA process.</p> <p><b>ECC Renewal:</b> An ECC should be renewed every 3 years prior to its expiry date (as indicated on the new ECC format). The contact details at the Department of Environmental Affairs and Forestry (DEAF) are as follows:</p> <p>Office of the Environmental Commissioner (Attention: Mr. Timoteus Mufeti)</p> <p>Tel: +264 (0) 61 284 2701</p>
	<p>Details requirements for public consultation within a given environmental assessment process (GN No 30 S21).</p> <p>The details the requirements for what should be included in an Environmental Scoping Report (GN No 30 S8) and an EIA report (GN No 30 S15) were already incorporated in the initial reports submitted for the expired ECC in 2015.</p>	<p>The project is already in its operational phase. However, if necessary and required, constant consultations and engagements with the interested and affected parties (stakeholders) should be continued. In case of grievances raised by the neighbouring land users such as the surrounding villages) to the Proponent, this should be addressed and resolved amicably.</p>
<p>Soil Conservation Act (No 76 of 1969)</p> <p><b>Regulated under the Ministry of Agriculture, Water and Land Reform</b></p>	<p>The Act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil, vegetation and water supply sources and resources, through directives declared by the Minister.</p>	<p>Duty of care must be applied to soil conservation and management measures must be included in the EMP. This is mainly aimed at soil disturbance through unnecessary creation of new tracks and pollution from project related activities.</p>

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
<p>Petroleum Products and Energy Act (No. 13 of 1990) Regulations (2001)</p> <p><b>Regulated under the Ministry of Mine and Energy</b></p>	<p>Regulation 3(2)(b) states that “No person shall possess or store any fuel except under authority of a licence or a certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area”</p>	<p>Care must be exercised when handling hydrocarbon products on site, regardless of volume.</p>
<p>Forestry Act 12 of 2001</p> <p><b>Regulated under the Ministry of Environment, Forestry and Tourism</b></p>	<p>Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act Section 22(1)). The Act prohibits the removal of and transport of various protected plant species.</p>	<p>There is some vegetation at very few areas of the site. Therefore, they should not be disturbed nor destroyed, unnecessarily, i.e., they should be conserved whenever possible.</p>
<p>The National Heritage Act (No. 27 of 2004)</p> <p>The National Monuments Act (No. 28 of 1969)</p> <p><b>Regulated under the Ministry of Education, Arts and Culture</b></p>	<p>The Act extends the protection of archaeological and historical sites to private and communal land and defines permit procedures regarding activities at such sites.</p> <p>The Act enables the proclamation of national monuments and protects archaeological sites.</p>	<p>Should heritage resources (e.g., human remains, etc.) are discovered at some point on and or around the site, these should be reported to the National Heritage Council of Namibia for relocation.</p> <p><b>Contact: Ms. Agnes Shiningayamwe (Regional Heritage Officer)</b></p> <p>Tel: 061 301 903</p>
<p>Pollution Control and Waste Management Bill</p> <p><b>Regulated under the Ministry of Environment, Forestry and Tourism</b></p>	<p>The bill aims to “prevent and regulate the discharge of pollutants to the air, water and land” Of particular reference to the Project is: Section 21 “(1) Subject to sub-section (4) and section 22, no person shall cause or permit the discharge of pollutants or waste into any water or watercourse.”</p>	<p>The Proponent and their workers should continue with the good waste management work (directly or indirectly) to ensure that the waste does not cause environmental threat and risk.</p> <p><b>No permit or license required.</b></p>

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
	Section 55 “(1) No person may produce, collect, transport, sort, recover, treat, store, dispose of or otherwise manage waste in a manner that results in or creates a significant risk of harm to human health or the environment.”	
Public Health Act (No. 36 of 1919)	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	The Proponent and all its employees should ensure compliance with the provisions of these legal instruments.  <b>No permit or license required.</b>
Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety of labourers.	
Public and Environmental Health Act No. 1 of 2015  <b>Regulated under the Ministry of Health and Social Services</b>	To provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters.	
Labour Act (No. 6 of 1992)  <b>Regulated under the Ministry of Labour, Industrial Relations and Employment Creation</b>	Ministry of Labour (MOL) is aimed at ensuring harmonious labour relations through promoting social justice, occupational health and safety and enhanced labour market services for the benefit of all Namibians. This ministry ensures effective implementation of the Labour Act No. 6 of 1992, specifically its Regulations, No. 156 Labour Act, 1992: Regulations relating to the health and safety of employees at work	The Proponent should ensure that the Solar Park operations, and maintenance works, do not compromise the safety and welfare of workers.  <b>No permit or license required.</b>

#### 4 EMP IMPLEMENTATION ROLES AND RESPONSIBILITIES

The chapter gives a presentation of the roles of different parties involved in the project cycle (for its planned phase (mining operations and maintenance)) and their respective responsibilities towards the implementation of the EMP.

This EMP informs all relevant parties listed below and everyone employed at the site as to their duties in the fulfilment of the legal requirements for the operation of the Solar Park. This is done with reference to the prevention and mitigation of anticipated potential negative environmental impacts. All parties should note that obligations imposed by the EMP are legally binding in terms of the Environmental Clearance granted by the relevant environmental permitting authority, to:

- Ensure compliance with regulatory authority stipulations and guidelines which may be local, provincial, national, and/or international.
- Verify environmental performance through information on impacts as they occur.
- Provide feedback for continual improvement in environmental performance.
- Identify a range of mitigation measures which could reduce and mitigate the potential impacts to minimal or insignificant levels.
- Detail specific actions deemed necessary to assist in mitigating the environmental impact of the project.
- Create management structures that addresses the concerns and complaints that may be raised by interested and affected parties (I&APs) or community members with regards to the project; and
- Establish a method of monitoring and auditing environmental management practices during this phase of the project.

#### **4.1 The Proponent (Mr. Gerson Uaroua)**

The Proponent is ultimately responsible for the implementation of the project EMP (management and mitigation measures) throughout the project's life cycle. The Proponent's responsibilities include:

- Managing the implementation of the EMP and updating and maintaining it when necessary.
- Management and monitoring of individuals and/or equipment on-site in terms of compliance with the EMP.
- The implementation of and compliance with the environmental management measures proposed in this document.
- Ensuring compliance with relevant environmental and related authorisations and license conditions.
- Identifying and appointing of appropriately qualified specialists (were necessary) to undertake the programmes in a timeous manner and to acceptable standards.

Alternatively, the Proponent may on ad-hoc basis seek services of an external Environmental Officer (ECO) to ensure EMP compliance throughout the project life cycle.

## 4.2 Environmental Control Officer (ECO) or Environmental Consultant

If they cannot personally carry out this task, the Proponent is required to assign the responsibility of overseeing the implementation of the whole EMP on the ground for the operations to an external qualified and experienced person, referred to in this EMP as the Environmental Control Officer (ECO). The ECO will have the following responsibilities:

- Make sure that the provisions of the EMP as well as the environmental authorization are complied with during operational and maintenance phase. The ECO Officer must be fully conversant with the Environmental Impact Assessment, Environmental Management Plan/Programme and environmental legislations, specifically the Environmental Management Act No. 7 of 2007 and its 2012 EIA Regulations.
- Issue instructions to the Proponent where environmental considerations call for action need to be taken.
- Submit regular written reports, ensuring that activities on site comply with all relevant environmental legislation, monitoring and verifying that adverse environmental impacts are kept to a minimum.
- Advising the Proponent on the removal of person(s) and/or equipment not complying with the provisions of the EMP.
- Making recommendations to the Proponent with respect to the issuing of fines for contraventions of the EMP.
- Undertaking an annual review of the EMP and recommending additions and/or changes to the document.
- Maintain records of all relevant environmental documentation.

## 4.3 Project Staff (Workers)

The two or three other project/site workers also have a personal responsibility to aid in the implementation of the EMP while present and working on site. Therefore, they will be required to adhere to the relevant management and mitigation measures to collectively protect the environment and promote environmental sustainability.

The above-listed environmental management parties on site will be required to implement the respective management (action plans) measures given under the next chapter.

## 5 ENVIRONMENTAL MANAGEMENT ACTION PLANS

This chapter presents the potential impacts for which the environmental management actions (measures) recommended and the implementation checklist (status of EMP implementation) will be done. It is under this chapter that the new or updated EMP implementation roles and responsibilities and updated and additional environmental management measures going forward are also covered.

### 5.1 Previously Identified Potential Adverse Environmental Impacts

The potential negative impacts were identified during the issuance of the ECC in 2019. The management and mitigation measures (management action plans) were also made for these covered impacts. The impacts that had been identified and managed on site are as follows (per project phase):

#### Operational phase' adverse potential impacts

- Physical soil disturbance
- Biodiversity,
- Air Quality,
- Health & safety,
- Waste generation (general, sewage and wastewater),
- Noise,
- Archaeological impact.

The implementation of the EMP and compliance during the validity period of the current environmental clearance certificate (ECC) is given in the table (**Table 3**) below. The evaluated and compliance status in **Table 3**. The status presents the progress that has been made to improve and ensure environmental management and sustainability between 11 March 2019 and January 2022. The EMP compliance status has been updated with the necessary mitigation and management measures made in January 2022.

**Table 3: Environmental and Social Management and Mitigation Measures for the planned mining activities on the three Mining Claims**

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
<b>MINING AND SITE MAINTENANCE PHASE</b>						
EMP implementation and training	Lack of EMP awareness and implications thereof	-A Comprehensive Health and Safety Plan for the project activities should be compiled. This will include all the necessary health, safety, and environmental considerations applicable to respective works on sites.	-All required Plans and systems are compiled and in place Safety, Health and Environmental Control Officer (ECO) is appointed	-Proponent	-Records of EMP implementation Plans and Systems	Pre-mining
Authorizations	Lack of Agreements, Permits/ Licenses	-All the required agreements and licenses or permits should be applied for and signed, respectively before commencement of work on the MCs, or as required.	-Applicable permits and licenses to be obtained from relevant authorities and kept on site for records keeping and future inspections	-Proponent	-Permits and Licenses	Prior to mining
EMP implementation and training	Lack of EMP awareness and implications thereof	-EMP trainings should be provided to workers on site  -All site personnel should be aware of necessary health, safety, and environmental considerations applicable to their respective work  -The implementation of this EMP should be monitored.	-Compliance monitoring conducted bi-annually and should be recorded  -EMP Refresher training for employees/workers every 6 months	-ECO	-Monitoring reports by the ECO  -ECC renewed on time  -Records of EMP training conducted	Throughout the mining phase



Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		-The site should be inspected, and a compliance audit done throughout <u>the project activities, monthly and compliance monitoring reports submitted to the DEAF bi-annually.</u>	-Timely renewal of the Environmental Clearance Certificate (ECC) every 3 years			
Land use (physical soils)	Land degradation	-Overburden should be handled more efficiently during mining works to avoid erosion when subjected erosional processes.  -Prevent creation of huge piles of waste rocks by performing sequential backfilling.  -Stockpiled topsoil and overburden waste rocks should be used to backfill the explored and disturbed site areas/spots.  -Soils that are not within the intended and targeted footprints of the site areas should be left undisturbed and soil conservation implemented as far as possible.	-No proliferation of informal vehicle tracks.  -No new erosion gullies.	-Proponent  -ECO	-Complaint's logbook	Throughout mining
Water resource	Over-abstraction (Water demand and availability)	-Water should be efficiently used by implementing water saving measures such as recycle and re-use where necessary and possible. This	-Proof/ recording/ quantification of water saving efforts	-Proponent  -ECO	-Permit issuance (or water purchasing agreements for carting to site)	Water supply agreements to be obtained prior to mining

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		includes using water for cooling and washing of mining equipment.  -Water conservation awareness and saving measures training should be provided to all the project workers so that they understand the importance of conserving water and become accountable.	-No complaints of water level drops and short in supply from local water users			Throughout the project life cycle
Soil and water resources	Soil and water resources pollution	-Spill control preventive measures should be in place on site to management soil contamination. These include:  (a) Identification of oil storage and use locations on site and allocate drip trays and polluted soil removal tools suitable for that specific surface (soil or hard rock cover) on the sites.  (b) Maintain equipment and fuel storage tanks to ensure that they are in good condition thus preventing leaks and spills.  (a) The oil storage and use locations should be visually	-No complaints of pollutants on the soils and eventually in the water due to mining activities  -No visible oil spills on the ground or contaminated/polluted spots.	-ECO	-Complaint's logbook  -Waste containers  -Non-permeable material to cover the ground surface at areas where hydrocarbons and potential pollutants are utilized.	Throughout the project life cycle

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>inspected for container or tank condition and spills.</p> <p>(b) Maintain a fully provisioned, easily accessed spill kit. Spill kits should be located throughout the active project sites contain the floor dry absorbent material and absorbent booms, pads, mats. These would be suitable for ground surface areas that are covered mainly by hard rocks.</p> <p>-All project employees should be sensitized about the impacts of soil pollution and advised to follow appropriate fuel delivery and handling procedures.</p> <p>-The Proponent should develop and prepare countermeasures to contain, clean up, and mitigate the effects of an oil spill. This includes keeping spill response procedures and a well-stocked cache of supplies easily accessible.</p> <p>-Project machines and equipment should be equipped with drip trays to contain possible oil spills when operated on site.</p>				

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-In cases of accidental fuel or oil spills on the soils from site vehicles, machinery and equipment, the polluted soil should be removed immediately and put in a designate waste type container for later disposal or can be replaced with a cleaner soil.</p> <p>-Polluted soil must be collected and transported away from the site to an approved and appropriately classified hazardous waste treatment facility.</p> <p>-Toilet water should be treated by discharging into chemical toilets and periodically emptied out before reaching capacity and transported to a wastewater treatment facility.</p>				
Biodiversity	Loss of Fauna and Flora	<p><b>Flora:</b></p> <p>-No onsite vegetation should be cut or used for firewood related to the project’s operations. The Proponent should provide firwood for his onsite camping workers from authorized firewood producer or seller.</p>	<p>-Incident reports of illegal hunting of wildlife by the project crew/workers.</p> <p>-No complaints of livestock theft, snaring or killing of livestock</p>	-ECO	-Complaint’s logbook	During site set up, and throughout the project life cycle

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>-Make use of the existing road network as much as possible and avoid off-road driving.</p> <p>-Vegetation clearing to be kept to a minimum.</p> <p>-Regular monitoring for alien plants within the project's footprint during mining.</p> <p><b><u>Fauna (domestic and wild)</u></b></p> <p>-Workers should refrain from disturbing, killing or stealing domestic and wild animals and killing small soil and rock outcrops' species found on site.</p> <p>-Poaching (illegal hunting) of wildlife from the area is strictly prohibited.</p> <p>-Environmental awareness on the importance of biodiversity preservation should be provided to the workers.</p>	<p>and wildlife by the project personnel</p> <p>-No disturbance to unmarked areas.</p> <p>No complaints from locals regarding unauthorised vegetation removal or cutting down of trees</p>		<p>-Anti-poaching unit of the Namibian Police Force</p> <p>-MEFT's Wildlife Protection Unit</p>	

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
Air Quality	Air quality (dust)	<p>-Project vehicle(s) should not be driven at a speed more than 40 km/h to avoid dust generation around and within the site area.</p> <p>-Dust masks, eye protective glasses and other respiratory personal protective equipment (PPE) such as face masks should be provided to the workers on site, where they are exposed to dust.</p>	<p>-Dust suppression measures implemented</p> <p>-Visible efforts to curb dust</p>	<p>-Proponent</p> <p>-ECO</p>	<p>-Grievance logbook</p> <p>-Dust suppression water tanks</p>	Throughout the project life cycle
Waste management	Environmental pollution	<p>-Workers should be sensitized to dispose of waste in a responsible manner and not to litter.</p> <p>-All domestic and general operational waste produced daily should be contained until such that time it will be transported to designated waste sites.</p> <p>-No waste may be buried or burned on site or anywhere else and no wastes left on the sites.</p> <p>-The site should be equipped with separate waste bins for</p>	<p>-A register of all waste generated on site is kept on site.</p> <p>-All waste disposal permits from relevant authorities are available on site.</p> <p>-No littering on and around the project site</p>	<p>-Proponent</p> <p>-Proponent</p> <p>-ECO</p>	<p>-Funds to acquire waste storage bins/ drums; and transport all waste from the site.</p> <p>-Waste storage containers</p>	Throughout the project life cycle

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>hazardous and general/domestic waste.</p> <p>-Hazardous waste, including emptied chemical containers should be safely stored on site and should be properly disposed of at approved waste sites.</p> <p>-Oil spills should be taken care of by removing and treating soils affected by the spill.</p> <p>-Careful storage and handling of hydrocarbons on site is essential.</p> <p>-Potential contaminants such as hydrocarbons and wastewater should be contained on site and disposed of in accordance with municipal wastewater discharge standards.</p>				
	<p>Wastewater generated by workers</p>	<p>-Sewage waste should be stored as per the portable chemical toilets supplied on site and regularly disposed of at the nearest wastewater treatment facility.</p>	<p>-Adequate toilet facilities on site.</p>	<p>-Proponent</p> <p>-ECO</p>	<p>-Chemical toilets, waste treatment agents/chemicals</p> <p>-Wastewater discharge permits</p>	<p>At site setup and throughout the project life cycle</p>

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		-Emptying of chemical toilets according to the manufacturer's specifications.				
Noise	Noise	-When operating the noise-making machinery onsite, workers should be equipped with personal protective equipment (PPE) such as earplugs to reduce exposure to excessive noise.	-PPE provided to workers operating noisy equipment and in noisy site areas.	-Proponent  -ECO	-N/A	Throughout the project life cycle
Health and Safety	Occupational & Community Health and Safety	-Workers should be subject to annual full medical check-up for all the workers at site to monitor the impact of project related activities.  -Workers should be provided with enough potable water on site.  -Workers should be properly trained on how to handle and	-Compilation of Comprehensive Health and Safety Plan  -Regular health screening of workers  -All onsite workers and visitors equipped with PPE.	-Proponent  -ECO	-Health and Safety Policies  -Funds to acquire health and safety related equipment. and to pay for employee medical services  -First Aid training for workers	Throughout the project life cycle



Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		<p>use site equipment and machinery.</p> <p>-When working on site, employees should be properly equipped with adequate personal protective equipment (PPE) such as coveralls, gloves, safety boots, earplugs, dust masks, safety glasses, etc.</p> <p>-Workers should not be allowed to drink alcohol prior to and during working hours nor allowed on site when under the influence of alcohol as this may lead to mishandling of equipment which results into injuries and other health and safety risks.</p> <p>-The site to be equipped with "danger" or "cautionary" signs for any potential danger or risk area identified on site (such as trenches and pits).</p>				
Fires	Accidental fire outbreak	<p>-Portable fire extinguishers should be provided on site.</p> <p>-No open fires to be created by project personnel.</p> <p>-Potential flammable areas and structures should be marked as</p>	-No Fires recorded (due to presence of workers)	<p>-Proponent</p> <p>-ECO</p>	-Fire extinguishers (1 per vehicle) and 1 per working site	Throughout the project life cycle

Aspect	Impact	Management & Mitigation Measure(s)	Key Performance Indicator (KPI)	Responsible Person	Resources	Timeline
		such with clearly visible signage.				
Archaeology and heritage	Accidental disturbance and destruction of archaeological or heritage objects and sites	-The management and mitigations or recommendation to minimize impact on archaeological and heritage resources. .	-Preservation of all artefacts that are discovered around project area  -Cessation of work upon discovery/unearthing of unknown objects	-Proponent  -ECO  -Archaeologist	-Technical Consultant (Archaeologist to help identify and advise on heritage object discovery)  -Salvage equipment -Flag tapes -GPS (site marking)	-Archaeologist to be called on site upon discovery of any unfamiliar object on site
Vehicular Traffic	Traffic safety	-Drivers of all project phases' vehicles should be in possession of valid and appropriate driving licenses and adhere to the road safety rules.  -Drivers should drive slowly (40km/hour or less)  -Project vehicles should be in a road worthy condition and serviced regularly.  -Vehicle's drivers should not be allowed to operate vehicles while under the influence of alcohol.	-All personnel and machinery are appropriately licensed.  -The vehicles are driven at the recommended speed.	-Proponent  -ECO	-Vehicular traffic compliance to be included in the annual environmental audit reporting	Throughout the project life cycle

## 5.2 Updated Environmental and Social Management Measures (If Any)

The aim of the management actions in this EMP is to avoid potential operational negative impacts where possible. Where impacts cannot be avoided, measures are provided to reduce the significance of these

Based on the information provided by the Proponent there have not been significant work done on site due to lack of financial and technical resources over the years. There is no other significant changes or amendment to the initial project activities. Therefore, once the required resources to start mining are acquired, the most important action plan will be the implementation of these management measures and effective monitoring (through environmental bi-annual monitoring and reporting).

The aim of all this is to enforce full compliance of the site activities to the governing legislations and ensure environmental sustainability by avoiding and or minimizing the negative impacts while maximizing the positive impacts of the project.

The recommendations and conclusions made for the overall report are as presented under the next chapter below.

## 6 ENVIRONMENTAL MONITORING, COMPLIANCE AND AUDITING

To ensure compliance with the legal requirements, minimize potential adverse impacts and improve environmental sustainability, the following are recommended for implementation:

### 6.1 Implementation, Monitoring of EMP Implementation and ECC Renewal

- All the management and mitigation measures provided herein are effectively and progressively implemented.
- **Environmental compliance (during the validity period of the ECC):** Bi-Annual Compliance Monitoring of the EMP implementation should be undertaken throughout the project cycle, i.e., twice a year (every 6 months) throughout the operations. Environmental Monitoring reports are to be compiled and submitted to the Department of Environmental Affairs and Forestry (DEAF) for archiving through provision made on the ECC Portal. This practice will make the ECC renewal easier when it is about to expire in future. Therefore, the Proponent should effectively monitor the EMP implementation and submit the monitoring reports to the DEAF. The submission is not only done for record keeping purposes, but also in compliance with the environmental legislation and conditions of the ECC. **The next compliance monitoring is anticipated for July 2022.**

## 6.2 Environmental Awareness

The Proponent should ensure that his employees and any third party who carries out all or part of their obligations are adequately trained regarding the implementation of the EMP, as well as regarding environmental legal requirements and obligations. Training may be conducted by the ECO, where necessary.

Environment and health awareness training programmes should be targeted at three distinct levels of employment, i.e., the executive, middle management, and labour. Environmental awareness training programmes shall contain the following information:

- The names, positions, and responsibilities of personnel to be trained.
- The framework for appropriate training plans.
- The summarized content of each training course.
- A schedule for the presentation of the training courses.
- The ECO shall ensure that records of all training interventions are kept in accordance with record keeping and documentation control requirements as set out in this EMP. The training records shall verify each of the targeted personnel's training experience.

## 7 RECOMMENDATIONS AND CONCLUSIONS

### 7.1 Recommendations

The planned activities on the Mining Claims No. 71032-71034 are of small-scale level and activities will be well limited within the MCs' boundaries only. Although the current ECC was issued in March 2019, there has not been actual work done on site by the Proponent due to the lack of financial and technical resources. It had been difficult sourcing funds between 2020 and 2021 because of COVID-19 that hit most businesses and organizations. The Proponent has been doing his best to source start-up funds to commence with the mining activities, hence, the need to renew the ECC before it expires.

Therefore, Serja Consultants is confident that the potential negative impacts associated with the project activities will be managed and mitigated by effectively implementing the recommended management action measures. It is therefore, recommended that the Mining of Semi-Precious Stones on Mining Claims No. 71032, 71033 & 71034 situated at Kamanjab, Outjo District in the Kunene Region should be granted a new Environmental Clearance Certificate, provided that:

- All the respective management (mitigation) measures provided in this EMP are effectively implemented and monitored as stipulated to achieve full EMP implementation compliance.
- All required permits, licenses, approvals, and document renewals that may be required for the project activities in future are obtained as required.

- The Proponent and all their project workers, contractors and or specialists comply with the legal requirements governing their project and its associated activities.
- All the necessary environmental and social (occupational health and safety) precautions provided are adhered to.
- **The next EMP Compliance check (Bi-Annual Monitoring)** should be done in September 2022, which will see progress reporting on the current and activities. The monitoring exercise can be undertaken either by the project ECO, or an independently appointed Environmental Assessment Practitioner (Environmental Consultant). An Environmental Audit/Compliance/Bi-Annual Report shall be compiled for every monitoring and submitted to the DEAF at the Ministry of Environment, Forestry and Tourism for archiving (via the ECC Online Portal under the valid ECC details). This would make the next ECC Renewal easier because of an in-between track record of monitoring progress prior to the expiry date of the valid ECC.

## 7.2 Conclusions

The Environmental Consultant recommends that the ECC be renewed so that the Proponent can commence with the project activities.

There have not been any activities done by the Proponent on site, pending sufficient start-up capital and technology. Therefore, the Environmental Consultant believes that the Proponent will comply with the legal requirements and commit towards environmental sustainability and renew the ECC on time again.

**Therefore, it is crucial for the Proponent, their workers, contractors and or specialists to continue with the effective implementation of the recommended management measures to protect both the biophysical and social environment. The aim would be to promote sustainable and safe development while ensuring a smooth and harmonious existence and purpose of the project activities in the host environment.**

# **APPENDIX A: THE COPY OF THE OLD ECC ISSUED IN 2019**



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

Tel: (00 26461) 284 2111  
Fax: (00 26461) 232 057

Cnr Robert Mugabe &  
Dr Kenneth Kaunda Street  
Private Bag 13306  
Windhoek  
Namibia

E-mail: [mwaka.sinchembe@met.gov.na](mailto:mwaka.sinchembe@met.gov.na)

Enquiries: Ms. Mwaka Lushetile

08 March 2019

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

Gerson V. Uaroua  
P.O. Box 527  
Okahandja  
Namibia

Dear Sir or Madam,

**SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR MINING OF SEMI-PRECIOUS STONES IN THE MINING CLAIM NO 71032 -71034 SITUATED AT KAMANJAB, OUTJO DISTRICT, KUNENE REGION**

I acknowledge receipt of all the necessary documents which constitute the Environmental Contract between you and the Government of the Republic of Namibia.

By virtue of these documents, I am satisfied that you have provided sufficient commitment to limit unnecessary environmental impacts for the duration of your mining activities. This Ministry reserves the right to attach further legislative and regulatory conditions for the duration of mining activities. From this perspective, I issue this clearance with the condition that if blasting is to be undertaken, Environmental Scoping Report and Environmental Management Plan should be submitted to this office.

On the basis of the above, this letter serves as an Environmental Clearance Certificate for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project activity. Instead, full accountability rests with Gerson V. Uaroua and his/her consultants.

This environmental clearance is valid for a period of 3 (three) years, from the date of issue unless withdrawn by this office.

Yours sincerely,

Fredrick Mupoti Sikabongo  
DEPUTY ENVIRONMENTAL COMMISSIONER

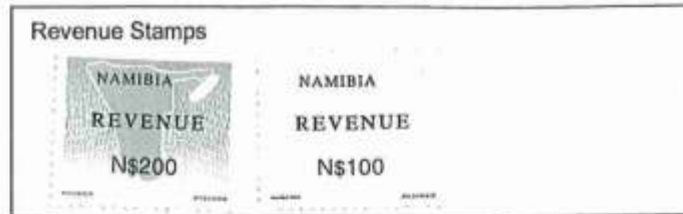


**“Stop the poaching of our rhinos”**

All official correspondence must be addressed to the Permanent Secretary

**APPENDIX B: A DATE STAMPED COPY OF THE  
ECC RENEWAL APPLICATION SUBMITTED TO  
THE MINISTRY OF MINES AND ENERGY  
(COMPETENT AUTHORITY)**





ANNEXURE 1

FORMS

Form 1

REPUBLIC OF NAMIBIA

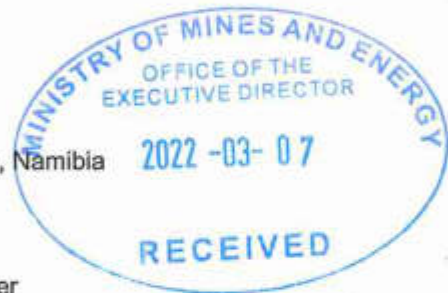
ENVIRONMENTAL MANAGEMENT ACT (No. 7 of 2007)

(Section 32)

**APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE – RENEWAL**

**PART A: DETAILS OF APPLICATION**

1. Name: Mr. Gerson V. Uaroua
2. ID No.: 83111310337
3. Correspondence Address: P. O. Box 527 Okahandja, Namibia
4. Name of Contact Person: Mr. Gerson V. Uaroua
5. Position of Contact Person: Owner / Managing Member
6. Telephone No.: +264 81 710 2745
7. Fax No: N/A
8. E-mail Address: [info@serjaconsultants.com](mailto:info@serjaconsultants.com)



**PART B: SCOPE OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE**

**1. THE ENVIRONMENTAL CLEARANCE CERTIFICATE IS FOR:**

The 'listed activities' that are relevant or related to the mining activities are listed below:

**MINING AND QUARRYING ACTIVITIES**

-Listed Activity 3.1 The construction of facilities for any process or activities which requires a license, right of other forms of authorization, and the renewal of a license, right or other form of authorization, in terms of the Minerals (Prospecting and Mining Act, 1992).

-Listed Activity 3.2 other forms of mining or extraction of any natural resources whether regulated by law or not.

-Listed Activity 3.3 Resource extraction, manipulation, conservation, and related activities.