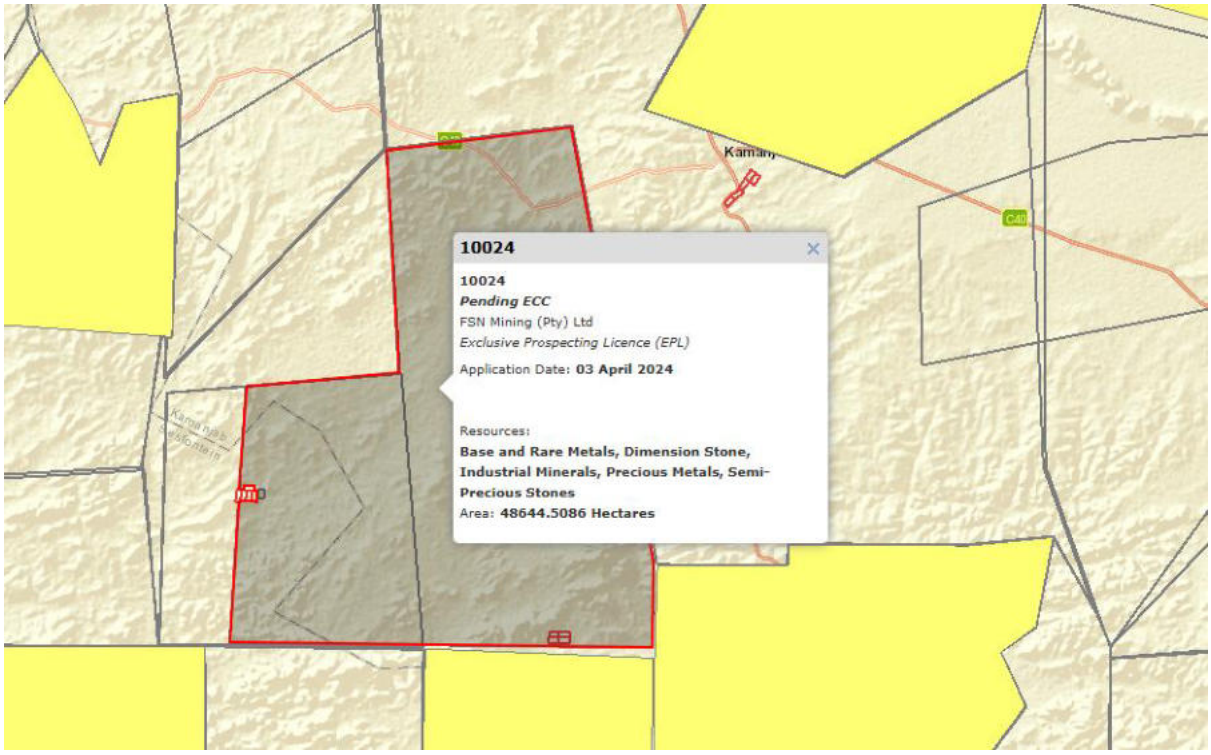
ENVIRONMENTAL SCOPING STUDY (ESS) FSN MINING (PTY) LTD — EPL 10024



Proponent: FSN Mining (Pty) Ltd

Prepared by: Augite Environmental Consultants cc

Region: Kunene Region, Namibia

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Executive Summary

This Environmental Scoping Study (ESS) has been prepared by **Augite Environmental Consultants cc**, the independent Environmental Assessment Practitioner (EAP) appointed by **FSN Mining (Pty) Ltd** to evaluate the potential environmental and socio-economic impacts associated with the proposed exploration activities on **Exclusive Prospecting Licence (EPL) 10024**. The EPL covers an area of **48,721 hectares** in the **Kunene Region** of north-western Namibia and falls within the **Anker Conservancy** and the **Torra Conservancy**, two prominent community-managed conservation areas known for their wildlife-based tourism, communal grazing, and rural livelihoods. The EPL is located approximately **15 km from Anker**, **30 km from Kamanjab**, and **40 km from Erwee**, placing it within a sparsely populated but socio-environmentally sensitive landscape. The EPL also lies within the greater **Palmwag tourism corridor**, an area important for desert-adapted wildlife and community tourism enterprises.

FSN Mining (Pty) Ltd proposes to explore for a range of minerals including **base metals, uranium, rare earth elements (REEs), lithium, nickel, cobalt, industrial minerals, and dimension stone**. The exploration programme will be conducted in phases, beginning with low-impact, **non-intrusive activities** such as geological mapping, rock and soil geochemical sampling, and ground geophysical surveys. If favorable geological indicators are identified, the proponent intends to conduct **early-stage intrusive exploration**, including limited pitting, trenching, and small-scale scout drilling. All activities have been designed to minimise disturbance, and all excavations will be rehabilitated immediately after sampling.

Need and Desirability of the Project:

Mineral exploration on EPL 10024 is considered desirable at both national and local levels. Namibia's long-term development goals, including **Vision 2030**, the **National Development Plans**, and strategies promoting the green energy transition, emphasise the importance of developing mineral resources responsibly to support economic diversification and global competitiveness. The minerals targeted by FSN Mining—such as lithium, cobalt, nickel, and REEs—are critical components of renewable energy technologies, electric vehicle batteries, and high-tech manufacturing, sectors that are rapidly expanding globally. At the regional level, the project is expected to create employment opportunities, generate local income, stimulate the use of local suppliers, and strengthen community participation in natural resource management within the Torra and Anker Conservancies. Exploration also has the potential to pave the way for long-term investment and economic opportunities in remote rural areas where

livelihoods are limited. The project is therefore both needed and desirable as it aligns with Namibia's economic development goals and supports local socio-economic upliftment without causing irreversible environmental impacts.

The ESS concludes that the proposed exploration activities are environmentally manageable, spatially limited, and temporary in duration. Potential impacts—such as soil disturbance, vegetation clearance, localised habitat disruption, dust, noise, and hydrocarbon spills—are rated low to medium before mitigation and reduce to low significance with the recommended mitigation measures and implementation of the Environmental Management Plan (EMP). No fatal flaws were identified. It is therefore recommended that the Ministry of Environment, Forestry and Tourism (MEFT) **issues an Environmental Clearance Certificate (ECC)** for the proposed activities.

Introduction

The purpose of this Environmental Scoping Study (ESS) is to identify, analyse, and document the potential environmental and socio-economic impacts associated with the proposed mineral exploration activities on Exclusive Prospecting Licence (EPL) 10024, situated within the Kunene Region of north-western Namibia. The assessment is carried out in fulfilment of the requirements of the Environmental Management Act (EMA) of 2007 and the Environmental Impact Assessment Regulations of 2012, which mandate that any listed activities—such as exploration drilling, trenching, pitting, and associated earthworks—must undergo environmental assessment prior to the issuance of an Environmental Clearance Certificate (ECC) by the Ministry of Environment, Forestry and Tourism (MEFT). This legal framework is intended to ensure that all prospective developments in Namibia are planned and executed in a manner that promotes ecological sustainability, avoids irreversible environmental degradation, and supports socio-economic growth.

Augite Environmental Consultants cc has been appointed by **FSN Mining (Pty) Ltd** as the independent Environmental Assessment Practitioner (EAP) responsible for conducting this Scoping Study. As the EAP, Augite Environmental Consultants cc is tasked with ensuring that the assessment is undertaken impartially, professionally, and in accordance with Namibia's environmental legislation and accepted international best-practice standards. This includes the identification of key environmental sensitivities, the collection and synthesis of baseline data, the facilitation of meaningful public consultation, and the formulation of suitable mitigation measures and management recommendations. The study also ensures that all potentially affected parties—including the Torra and Anker Conservancy committees, traditional authorities, nearby settlements, government agencies, and interested stakeholders—are meaningfully engaged in the environmental decision-making process.

EPL 10024 covers approximately 48,721 hectares and lies within the Anker Conservancy and Torra Conservancy landscape, a region characterised by semi-arid savannah vegetation, rugged metamorphic basement rock terrains, and the presence of desert-adapted wildlife. The EPL is located approximately 15 kilometres from the settlement of Anker, 30 kilometres from Kamanjab, and 40 kilometres from Erwee, placing it within a remote but socially and environmentally important communal area where livelihoods depend on livestock farming, tourism, natural resource use, and wildlife conservation. The landscape also forms part of the

broader Palmwag–Damaraland ecological corridor, which supports a variety of wildlife species and tourism operations, making careful environmental planning essential.

FSN Mining (Pty) Ltd proposes to undertake early-stage exploration activities on the EPL to assess the potential for mineral deposits of economic significance, including base metals, uranium, rare earth elements (REEs), lithium, nickel, cobalt, industrial minerals, and dimension stone. These minerals are of strategic importance both globally and nationally, and their exploration aligns with Namibia's aspirations to diversify its mineral economy and support the transition to renewable energy technologies. The exploration programme is designed to be implemented in a phased manner, beginning with low-impact, non-intrusive techniques followed by limited intrusive methods only where justified by geological results.

This ESS therefore serves multiple functions: it provides authorities with a clear understanding of the proposed project; it establishes the environmental and social context against which the project must be evaluated; it identifies and assesses potential risks and impacts; and it recommends measures to ensure that exploration is conducted responsibly and transparently. The conclusions and recommendations contained in this report are intended to assist MEFT in its decision-making and to provide FSN Mining (Pty) Ltd with a framework for conducting exploration in a manner that is safe, sustainable, and compatible with local land uses and environmental values.

Project Background and Proponent Details

FSN Mining (Pty) Ltd has appointed **Augite Environmental Consultants cc** as the Environmental Assessment Practitioner (EAP) to conduct the Environmental Scoping Study and prepare the required documentation for the Environmental Clearance Certificate application. The proposed project involves early-stage mineral exploration on **EPL 10024**, which covers **48,721 hectares** and is situated in the **Kunene Region**, entirely within the boundaries of the **Anker Conservancy** and the **Torra Conservancy**. The EPL lies approximately **15 km west of Anker**, **30 km southwest of Kamanjab**, and **40 km northwest of Erwee**, and forms part of the wider Palmwag-Damaraland landscape. The area is remote, sparsely populated, and characterised by rugged metamorphic terrains, conservancy-managed land, and a semi-arid climate supporting desert-adapted wildlife.

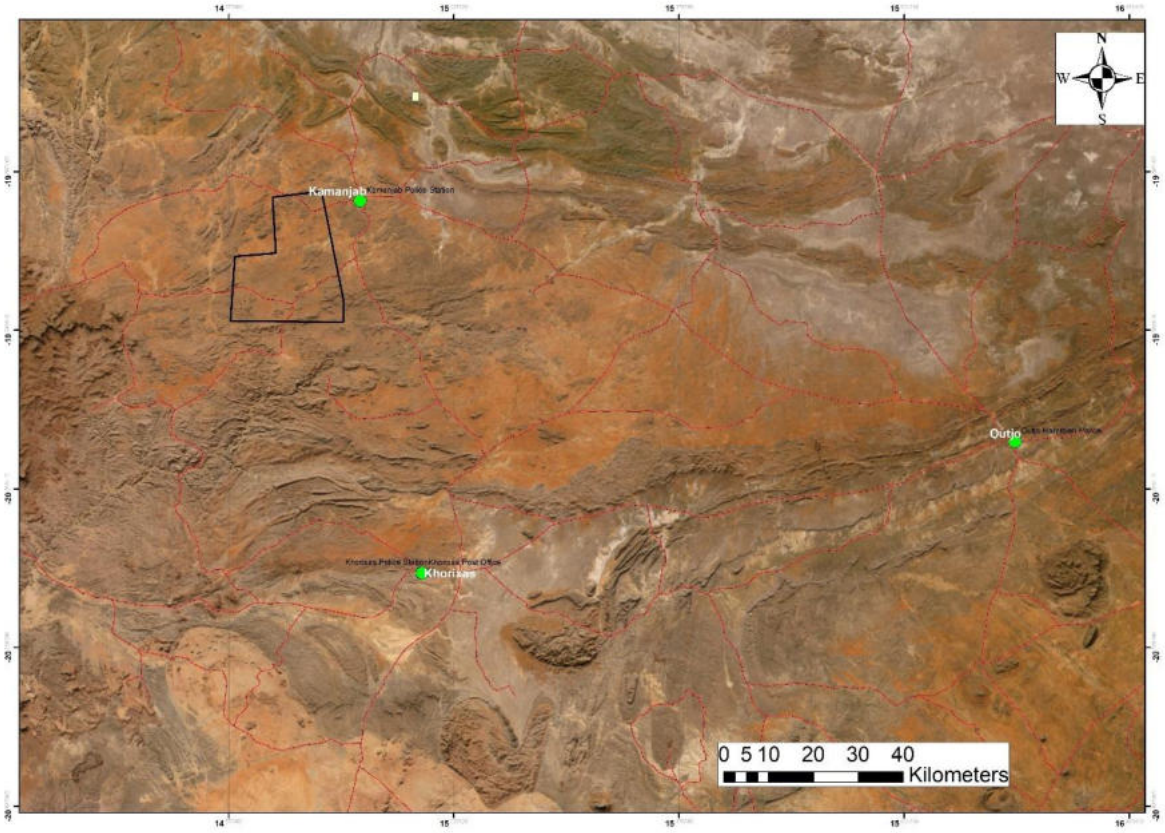


Figure 1. Location map relative to the surrounding towns.

The exploration programme is divided into two distinct phases. The first phase involves **non-intrusive exploration methods**, which are essential for establishing baseline geological information and identifying potential mineralised zones. These activities include systematic geological mapping to document lithologies, structural features, alteration patterns, and

observable mineral occurrences. Rock chip sampling and comprehensive soil geochemistry surveys will be conducted in key areas to identify geochemical anomalies that may indicate subsurface mineralisation. Ground geophysical surveys—such as magnetics, radiometrics, and electromagnetic profiling—will be used to detect physical contrasts in the subsurface, assisting in the identification of potential ore bodies, lithological boundaries, and structural traps. These activities require minimal equipment, involve no excavations, and utilise existing vehicle tracks wherever possible to avoid unnecessary environmental damage.

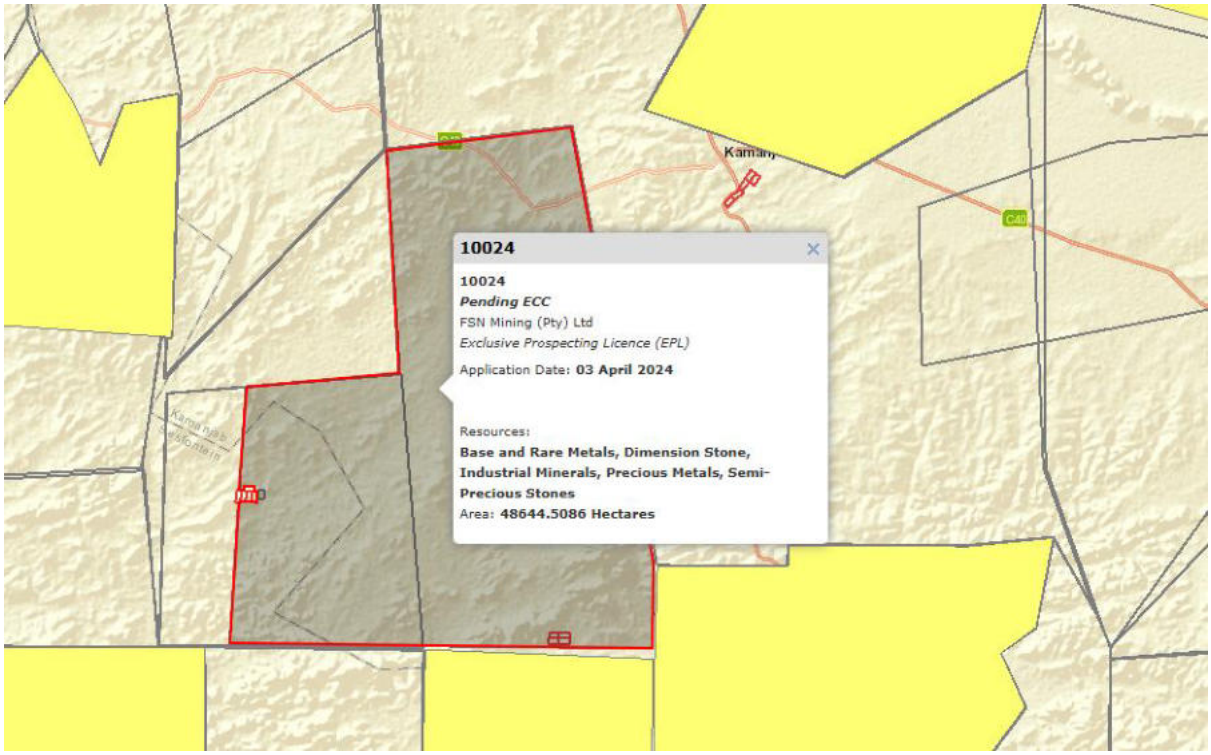


Figure 2. The current status of EPL10024.

If results from the non-intrusive phase are encouraging, FSN Mining will progress to **early-stage intrusive exploration**. This involves the excavation of small pits—generally 1.5 metres by 1.5 metres—to expose the subsurface bedrock and investigate the continuity of mineralisation identified at the surface. Shallow trenches may also be created along favourable geological structures or anomalies to provide continuous lithological exposure. Both pits and trenches will be backfilled immediately after sampling to restore the land. The project may also include **scout drilling**, typically involving fewer than ten drillholes distributed across the EPL. Drillholes are used to obtain precise subsurface geological information and to confirm mineralisation at depth. Drill pads will be situated in open areas with minimal vegetation to avoid habitat loss, and sumps will be constructed to contain drill effluent. All drilling fluids will be handled responsibly, and the sumps rehabilitated at the end of the operation.

The exploration programme will be undertaken by small field teams consisting of geologists, field assistants, sampling crews, and, when necessary, drilling specialists. Temporary mobile camps may be established outside of ecologically sensitive areas, or staff may commute from nearby settlements depending on operational logistics. Exploration will take place intermittently over several years, typically in short seasonal campaigns.

Throughout all stages of exploration, FSN Mining is committed to implementing strong environmental management practices to ensure that impacts remain minimal. Activities will avoid sensitive habitats, drainage lines, heritage resources, and areas of high wildlife activity. By adhering to the Environmental Management Plan and engaging closely with the Torra and Anker Conservancy committees, the project aims to integrate into existing land uses in a respectful and environmentally responsible manner.

Project Description

The proposed exploration programme will be implemented in two stages. The first stage involves non-intrusive exploration techniques aimed at generating a preliminary understanding of the geology, mineralisation patterns, and structural controls within the EPL. These activities include geological field mapping, collection of soil and rock samples for geochemical analysis, and various forms of ground geophysical surveys such as magnetics, radiometrics, and electromagnetic profiling. These activities are low-impact, requiring no excavation or ablution infrastructure, and generally involve small teams operating on foot or from existing tracks.

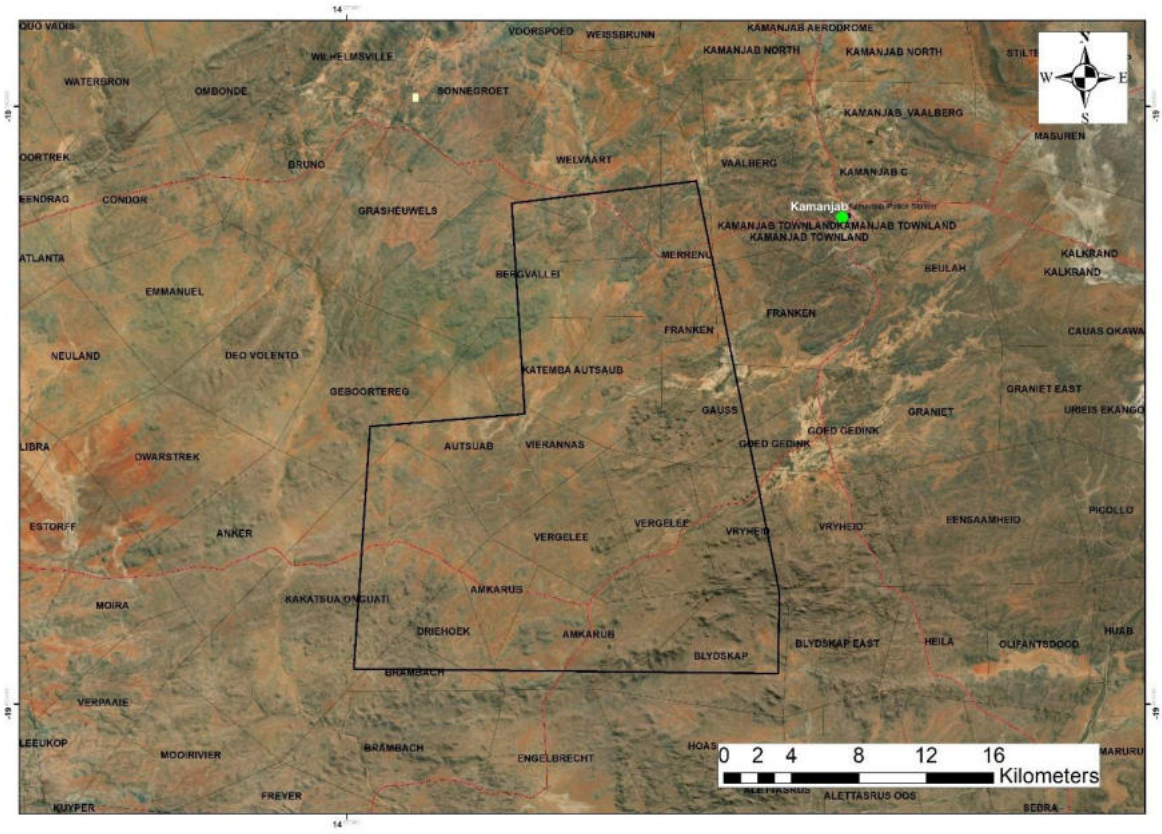


Figure 3. The EPL10024 with the surrounding farms located in the area.

If results from the initial phase indicate favourable mineralisation potential, FSN Mining will proceed to early-stage intrusive exploration. This may involve small-scale pitting and trenching to expose subsurface lithologies and mineralised zones for sampling and geological logging. Pits and trenches will be excavated using hand tools or a small excavator, depending on the terrain, and will not exceed depths of two metres. All excavation sites will be immediately backfilled and rehabilitated. Scout drilling may also be undertaken, typically involving fewer

than ten drillholes distributed across the EPL. Drillpads will be constructed in previously disturbed or naturally open areas to minimise vegetation clearing, and drill sumps will be lined and rehabilitated upon completion. The project will use water efficiently and will avoid any abstraction from local sources, transporting water from external suppliers instead.

Legal and Regulatory Framework

The proposed exploration activities on EPL 10024 are subject to a comprehensive suite of Namibian legislation, regulations, and policy directives that collectively guide environmental protection, resource management, and sustainable development. Central to this regulatory framework is the **Environmental Management Act (EMA) No. 7 of 2007**, which establishes the legal requirement for environmental assessments and governs all activities that may have significant environmental or social consequences. The EMA is supported by the **Environmental Impact Assessment Regulations (Government Notice 30 of 2012)**, which specify the procedural requirements, public consultation guidelines, and environmental management obligations that must be followed prior to the issuance of an Environmental Clearance Certificate (ECC) by the Ministry of Environment, Forestry and Tourism (MEFT). Exploration activities such as drilling, trenching, bulk sampling, and the movement of heavy machinery are explicitly listed in the EIA Regulations, thereby triggering the need for this Scoping Study and the preparation of an Environmental Management Plan (EMP).

In addition to the EMA, the project is regulated under the **Minerals (Prospecting and Mining) Act No. 33 of 1992**, administered by the Ministry of Mines and Energy (MME), which outlines the legal responsibilities of the licence holder with respect to prospecting activities, reporting obligations, and protection of the environment during exploration. Water-use considerations fall under the **Water Act of 1956** and the **Water Resources Management Act No. 11 of 2013**, which protect groundwater sources and regulate water abstraction, particularly in arid regions such as Kunene where water scarcity is acute. Although exploration under this project does not require abstraction, strict handling of water sourced from outside the EPL boundary remains a legal requirement.

The **Forest Act No. 12 of 2001** protects specific plant species, prohibits unauthorized removal of trees, and mandates permits for clearing vegetation. Given the presence of protected or slow-growing species such as *Welwitschia mirabilis* in north-western Namibia, compliance with this Act is essential. The **National Heritage Act No. 27 of 2004** protects archaeological sites, rock engravings, and cultural artifacts, many of which are found throughout the Kunene Region. A mandatory **chance-find procedure** will govern any unexpected discoveries to ensure full compliance with heritage legislation.

Other supporting legislation includes the **Labour Act No. 11 of 2007**, which safeguards the rights, health, and safety of exploration workers; the **Hazardous Substances Ordinance 14 of**

1974, which governs the handling and storage of fuels and chemicals; and the **Atmospheric Pollution Prevention Ordinance 11 of 1976**, which regulates emissions, dust, and air quality impacts. At an international level, FSN Mining (Pty) Ltd has committed to aligning its operations with **IFC Performance Standards**, the **Equator Principles**, and established global best practices for environmental and social risk management. These frameworks emphasise early risk identification, biodiversity protection, meaningful stakeholder engagement, and avoidance of adverse impacts. Collectively, the legal and policy framework ensures that exploration is conducted responsibly, transparently, and in line with Namibia's commitment to sustainable resource development.

Infrastructure and Services in the Area

The broader area surrounding EPL 10024 is rural, sparsely populated, and characterised by limited infrastructure. Basic services exist primarily in the nearest settlements of Anker, Kamanjab, and Erwee, which serve as the main logistical support points for exploration activities. Kamanjab, located approximately 30 kilometres from the EPL, provides essential services such as fuel stations, general stores, accommodation facilities, small mechanical workshops, and limited medical services. It also serves as a hub for acquiring basic supplies, food, water, and fuel necessary for field operations. Anker, approximately 15 kilometres from the EPL boundary, offers minimal infrastructure but serves as an important community reference point for engagement with conservancy representatives and local residents. Erwee, around 40 kilometres southeast of the EPL, provides additional access to basic amenities and acts as a secondary community gateway.

Road access in the region consists mainly of gravel roads and well-established 4x4 tracks, typical of communal conservancy landscapes in north-western Namibia. The C35 trunk road runs through Kamanjab and connects the region to larger towns such as Outjo and Opuwo. Internal access within the EPL will rely heavily on existing conservancy tracks and informal paths, limiting the need for any new infrastructure. There are no bulk power lines, pipelines, or industrial facilities within the EPL, and no permanent dwellings or farming homesteads are located inside the licence area. Telecommunications are intermittent, with network coverage dependent on topography and weather conditions. The limited infrastructure underscores the need for strict planning, self-sufficiency, and environmental responsibility during exploration.

Land Use of the Area

Land within and surrounding EPL 10024 is primarily used for communal grazing, wildlife conservation, and nature-based tourism. The EPL falls entirely within the Torra Conservancy and Anker Conservancy, both of which form part of Namibia’s globally recognised Community-Based Natural Resource Management (CBNRM) programme. These conservancies are responsible for managing wildlife, controlling grazing pressure, and facilitating joint-venture tourism operations that benefit local communities. Tourism establishments in the broader Palmwag–Damaraland corridor rely heavily on the region’s

desert-adapted wildlife, scenic landscapes, and cultural heritage. As such, land use within the area is sensitive and requires compatibility with conservation objectives.

Livestock farming—mainly cattle and goats—remains the primary livelihood for many households in Anker, Erwee, and the surrounding conservancy areas. Grazing is seasonal and influenced by rainfall patterns, with communities often moving livestock across large areas to access water and pasture. The absence of intensive agriculture or industrial activity reflects the region's environmental constraints, including aridity, poor soils, and limited surface water. This land-use pattern makes low-impact exploration compatible with local livelihoods, provided activities avoid sensitive ecological zones, do not interfere with grazing routes, and are conducted in consultation with the conservancy leadership.

Need and Desirability of the Project

The need and desirability of mineral exploration within EPL 10024 must be understood in both national and local contexts. At the national level, Namibia has prioritised the development of its mineral sector as part of its long-term economic strategy. Minerals such as lithium, nickel, cobalt, rare earth elements, and uranium are critical to global energy transitions, renewable technologies, electric vehicles, and advanced manufacturing. Namibia seeks to position itself as a key supplier of these strategic minerals, thereby strengthening its economic resilience, diversifying revenue sources, and attracting foreign investment. Exploration is the first essential step in understanding mineral potential and unlocking future economic opportunities.

Locally, the desirability of the project lies in its potential to stimulate economic activity in remote, rural areas where employment opportunities are limited. Exploration will create short-term jobs, provide training opportunities, and generate demand for goods and services from local suppliers. Conservancies may benefit from increased economic participation and strengthened resource management. The project also aligns with regional development priorities that aim to integrate rural communities into the national economy while maintaining ecological integrity. Given the small-scale, temporary, and reversible nature of exploration impacts, the activity is environmentally acceptable and socially desirable when managed responsibly.

Project Alternatives Considered

In line with MEFT requirements, various alternatives were considered during the Scoping process. These include:

Alternative 1: Proposed Exploration Activities (Preferred Option)

This option involves undertaking phased, responsible, early-stage mineral exploration combining non-intrusive and limited intrusive methods. This approach allows for the identification of mineral resources while minimising environmental impacts, aligning with national development priorities and supporting rural socio-economic upliftment. This is the preferred option because it balances environmental protection with economic potential.

Alternative 2: Modified Exploration Methods

Alternative methods, such as excluding drilling or avoiding certain areas during sensitive wildlife periods, were considered. These modifications may be implemented during operational planning if environmental sensitivities or stakeholder concerns warrant them. The project is flexible and adaptive, allowing adjustments to exploration techniques to ensure compatibility with environmental and social conditions.

Alternative 3: Alternative Locations

The mineral potential is tied to the specific geological formations underlying EPL 10024, particularly the Huab Metamorphic Complex and Fransfontein Suite intrusives. As mineralisation is highly site-specific, relocating exploration activities outside the EPL is not feasible or scientifically justified.

No-Go Alternative

The No-Go option assumes that no exploration takes place. While this avoids all environmental impacts, it also results in lost opportunities for economic development, job creation, and

geological understanding of the region. The No-Go option would undermine national mineral development objectives and prevent potential socio-economic benefits for local communities. Although environmentally benign, this option is not considered desirable due to its negative socio-economic implications.

Site Access and Logistics

Access to EPL 10024 is primarily from Kamanjab, using the C35 main gravel road and branching onto conservancy-managed tracks leading toward Anker and the EPL boundary. From Anker, a network of dirt tracks and 4x4 routes provides access into the interior of the licence area. These tracks are well-used by conservancy patrols, livestock farmers, wildlife rangers, and tourism operators. The proponent will rely extensively on these existing tracks to avoid landscape disturbance, limit vegetation clearing, and maintain the natural aesthetic of the conservancy.

During exploration, personnel and equipment will be transported to the area using 4x4 vehicles. Temporary field camps, if required, will be established in already disturbed or naturally open areas outside sensitive zones. No new roads, permanent structures, fuel depots, or water abstraction points will be constructed as part of the project. Water will be transported from nearby settlements such as Kamanjab. All access will be planned in consultation with conservancy management to avoid wildlife corridors, grazing hotspots, or cultural heritage sites.

Description of the Receiving Environment

Physical Environment

Climate

The climate within EPL 10024 is classified as semi-arid to arid, typical of the Kunene Region's interior plateau. Rainfall is scant, erratic, and highly seasonal, with an average precipitation range of 100–200 mm per annum, falling almost exclusively between December and April. Prolonged drought periods are common, and interannual variability often results in years of below-average rainfall, placing significant pressure on vegetation, wildlife, and livestock.

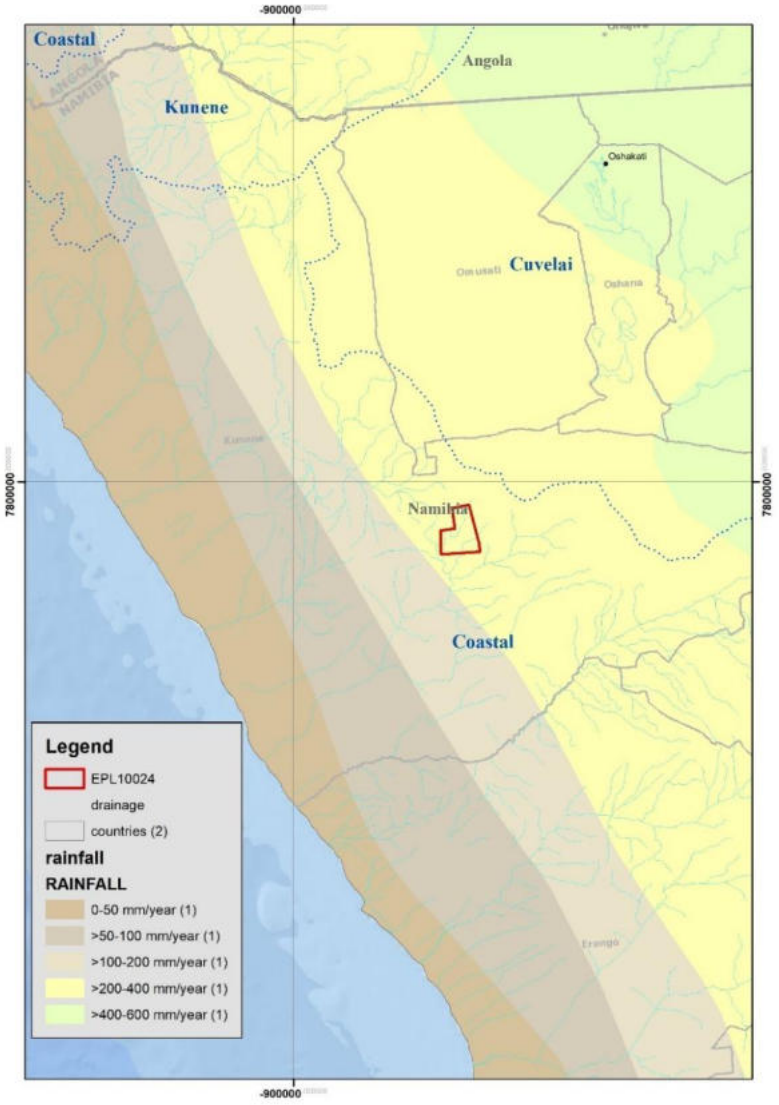


Figure 4. The regional rainfall in Namibia and around EPL10024.

Temperatures fluctuate widely, with summer daytime temperatures reaching 35–40°C, while winter nights can drop below 5°C. This temperature variability creates physiological stress on flora and fauna, favouring species that are well adapted to extreme environmental conditions. Evaporation rates are extremely high and frequently exceed rainfall by over tenfold, resulting in limited surface water availability. Seasonal winds are strong and can contribute to dust movement, particularly during prolonged dry periods. These climatic conditions underscore the importance of minimising soil disturbance and avoiding activities that could exacerbate erosion or dust emissions.

Topography and Landscape Character

The topography within EPL 10024 is dominated by rugged, undulating metamorphic basement terrain interspersed with koppies, rocky outcrops, shallow valleys, and scattered drainage lines. The landscape consists of gently sloping plains at elevations ranging from 700 to 1,200 metres above sea level, transitioning into higher, more rugged zones in the northern and eastern parts of the EPL. The terrain is visually dramatic, characterised by exposed rock formations, inselbergs, and banded gneiss structures that provide a strong sense of place typical of the Damaraland–Palmwag region.

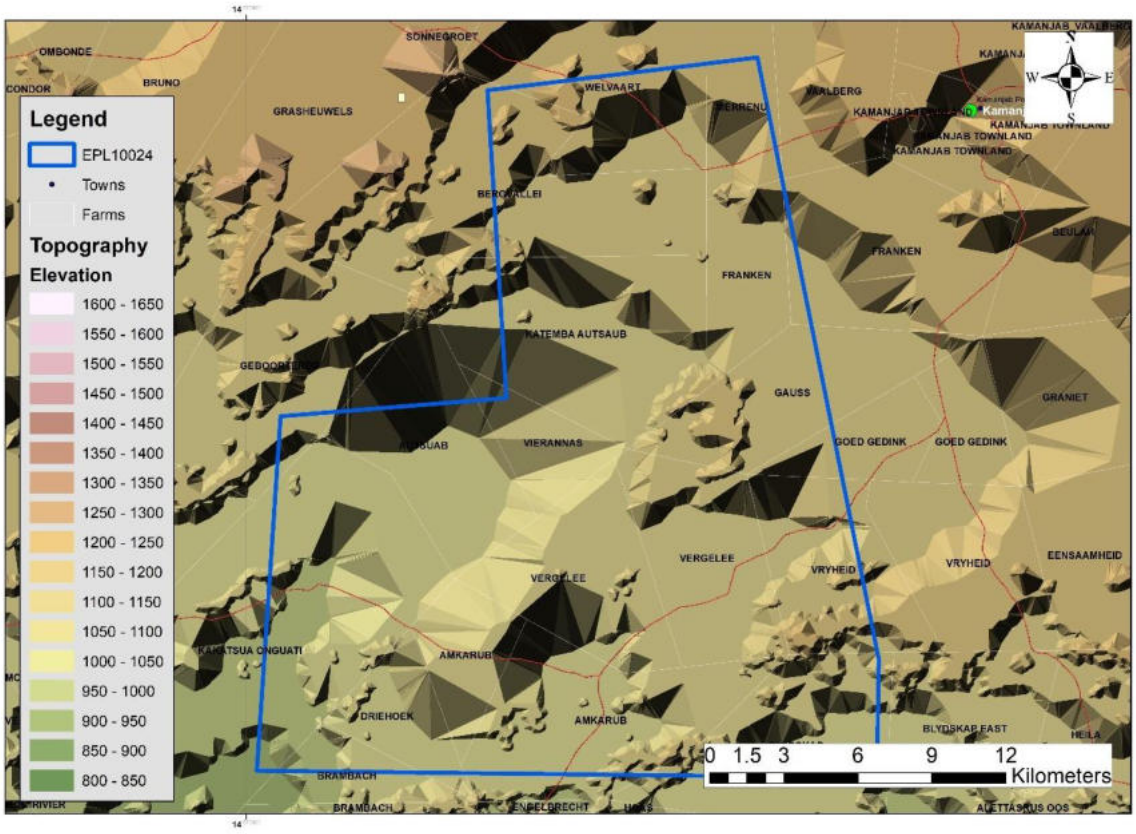


Figure 5. The topographical map of EPL10024.

The scenic nature of the landscape is important to the tourism economy of the Torra and Anker Conservancies. Many visitors travel to this region specifically for its striking geology, desert-adapted wildlife, and panoramic views. The rugged terrain also restricts large-scale human development and limits agricultural potential, reinforcing the need for small-footprint, low-impact activities.

Geology and Lithology

The EPL is situated within the Huab Metamorphic Complex, an ancient crustal terrane comprising high-grade metamorphic rocks that include paragneiss and orthogneiss. These lithologies exhibit strong foliation, banding, and evidence of intense deformation, reflecting the Proterozoic tectonometamorphic history of north-western Namibia. The paragneiss units are typically biotite- and quartz-rich, often displaying migmatitic textures, while the orthogneiss bodies represent metamorphosed granitic and granodioritic intrusions.

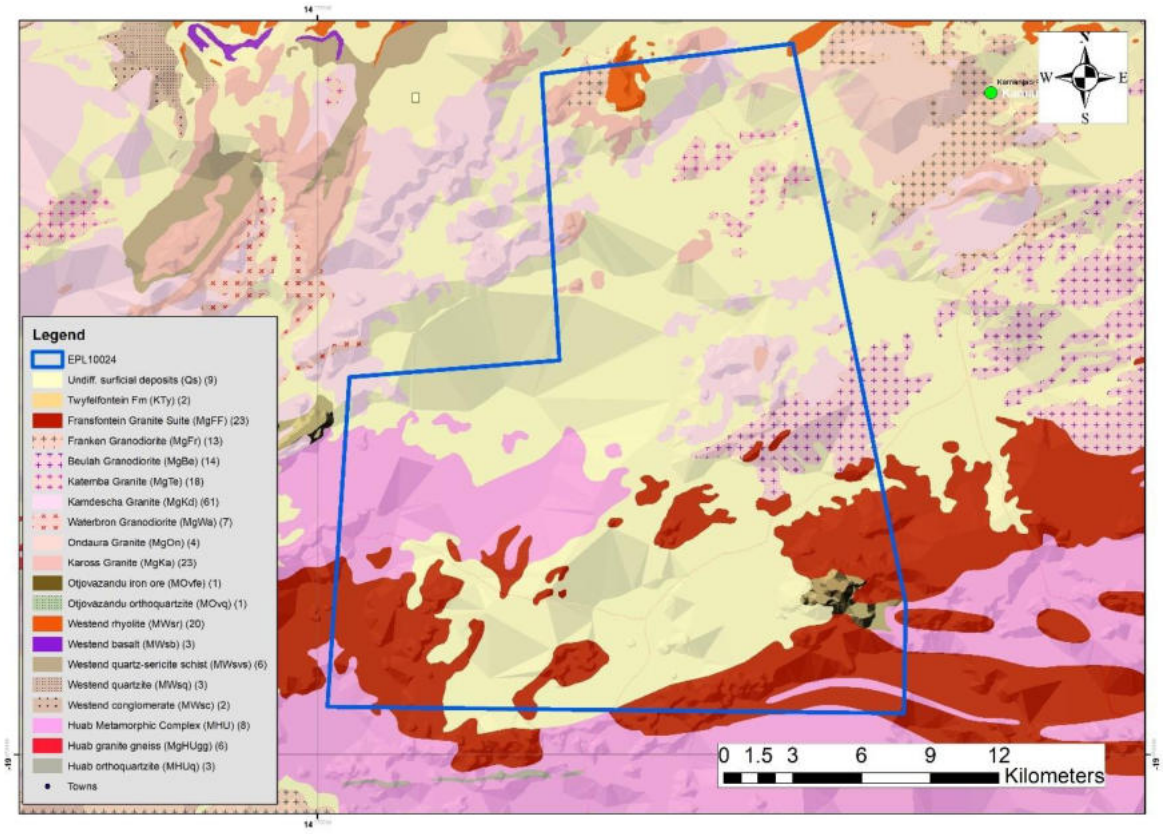


Figure 6. The geological map of EPL10024.

Intruding into these basement rocks are granites and granodiorites of the Fransfontein Suite, which occur predominantly in the south-western and eastern margins of the EPL. These rocks are geologically significant because they often host pegmatites, quartz veins, and mineralisation associated with rare earth elements, uranium, lithium-bearing minerals, and base metals. The juxtaposition of metamorphic basement and intrusive bodies creates structural and geochemical environments conducive to diverse mineral systems, which forms the foundation for FSN Mining's exploration interest.

Soils

Soils across the EPL are typically shallow, stony, and poorly developed, consisting mainly of lithosols, regosols, and calcareous sandy soils. These soils are derived from the weathering of gneisses and granitic rocks and are characterised by low organic content and limited moisture retention capacity. In lower-lying valleys and ephemeral drainage lines, soils may be slightly deeper and more fertile, supporting clusters of shrubs, grasses, and occasional trees.

The fragility of the soil environment is a key environmental consideration. Soil erosion is a significant risk, particularly on slopes or in areas where vegetation cover is sparse. Any disturbance from excavation or off-road vehicle movement can accelerate erosion, making the avoidance of sensitive soil areas a priority during project planning.

Hydrology and Groundwater

There are no perennial rivers or natural permanent water bodies within EPL 10024. The hydrological network is dominated by ephemeral drainage channels, active only during significant rainfall events. These ephemeral flows can cause rapid runoff and localized flooding in narrow valleys, but water quickly infiltrates or evaporates, leaving dry riverbeds for most of the year.

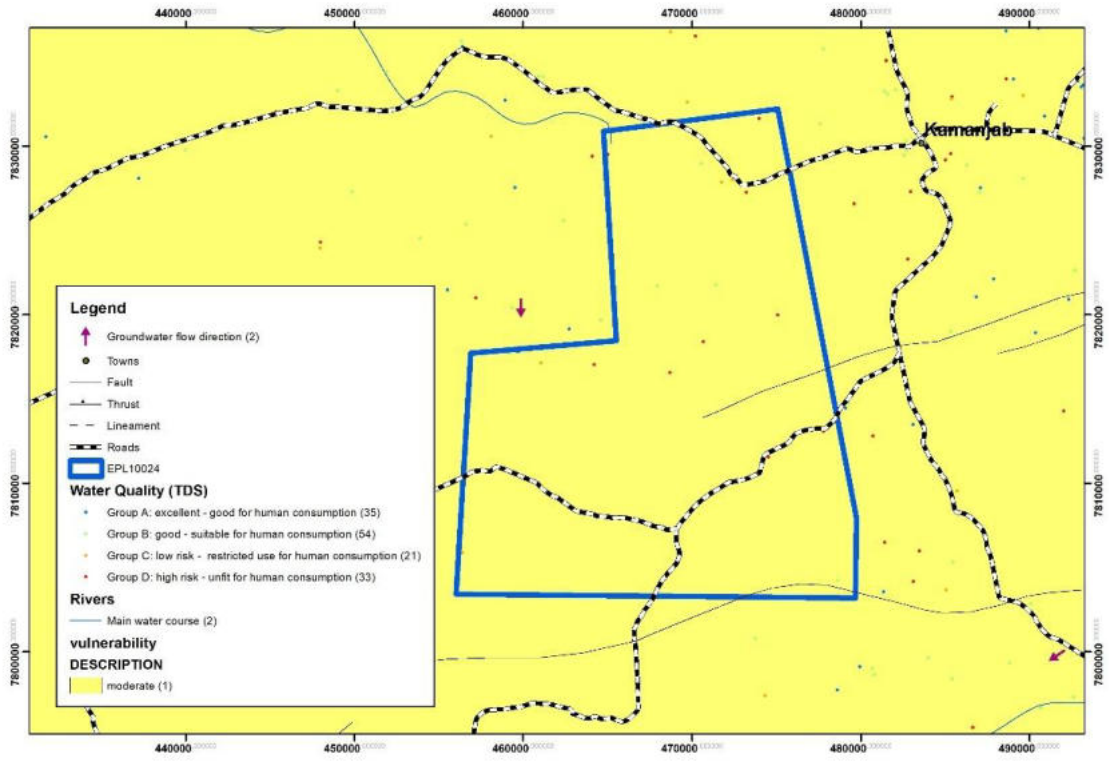


Figure 7. The hydrogeological map of the area.

Groundwater in the region occurs in fractured basement aquifers with low and variable yields. Water is typically accessed through hand-dug wells or boreholes in nearby settlements such as Kamanjab and Anker. Due to the limited groundwater availability and the sensitivity of the hydrological system, exploration activities must not involve groundwater abstraction within the EPL. Water for drilling and field operations will therefore be sourced from external suppliers to avoid placing pressure on local resources.

Biological Environment

Vegetation

EPL 10024 falls within the Kunene Semi-Arid Savanna biome, which supports vegetation that is highly adapted to drought, nutrient-poor soils, and grazing pressures. Dominant vegetation includes mopane (Colophospermum mopane) woodlands, which form extensive stands across low-lying areas, as well as Terminalia, Commiphora, Acacia, and Boscia species. Rocky outcrops host pockets of hardy shrubs and succulents, while ephemeral drainage lines support slightly denser vegetation.

The area may also contain isolated populations of protected plant species, most notably Welwitschia mirabilis, a slow-growing, iconic species endemic to the Namib. Other protected

or slow-growing species may include Commiphora resiniferous trees and certain succulent flora. These species are highly sensitive to disturbance, requiring strict avoidance measures.

Fauna

The fauna of the EPL and surrounding conservancies is diverse and includes several species of conservation concern. Common mammalian species include oryx, springbok, kudu, Hartmann's mountain zebra, giraffe, jackal, brown hyena, and leopard. Although desert-adapted elephants occur throughout the broader Kunene landscape, their use of the EPL is expected to be occasional. Wildlife movement corridors are extremely important to conservancy tourism operations, and exploration must avoid disrupting these pathways.

Birdlife is abundant, with raptors such as martial eagles, black eagles, peregrine falcons, and various owls commonly observed. Ground birds such as guinea fowl, francolins, and korhaans are widespread. Reptiles including lizards, geckos, snakes, and tortoises thrive in the region's warm climate and rocky microhabitats.

While wildlife populations are adapted to natural disturbances, they remain sensitive to noise, off-road driving, habitat fragmentation, and human presence. Accordingly, exploration activities must minimise disturbance, particularly during sensitive periods such as breeding seasons.

Socio-Economic Environment

Settlements and Demographics

The EPL is located in a rural area with sparse human settlement. The nearest communities include Anker (approximately 15 km from the EPL), Kamanjab (approximately 30 km), and Erwee (approximately 40 km). These communities are characterised by low population densities, limited infrastructure, and reliance on communal land tenure systems. Kamanjab functions as the main service centre for the area, providing access to fuel, groceries, schools, health services, and limited commercial infrastructure.

Populations in the region consist primarily of Damara and Herero communities, with strong traditional leadership structures and active conservancy committees overseeing land and wildlife management.

Land Tenure and Conservancies

EPL 10024 lies entirely within the Torra Conservancy and Anker Conservancy, both of which operate under Namibia's highly successful Community-Based Natural Resource Management (CBNRM) system. Conservancies manage wildlife resources, control grazing patterns, support tourism ventures, and promote local economic development through benefit-sharing arrangements. These conservancies rely heavily on wildlife-based tourism, which is a major contributor to local employment and income generation.

The communal nature of land tenure means that exploration activities must be carefully managed to maintain harmonious relationships with local communities and must avoid interfering with traditional land uses and wildlife management practices.

Livelihoods and Economic Activities

The primary livelihood in the region is livestock farming, mainly cattle and goats. Households often practice mixed subsistence strategies, including small-scale agriculture, seasonal grazing, pensions, social grants, and occasional wage labour. Tourism—especially wildlife viewing and photography—is an important supplementary income source through conservancy-operated lodges and partnerships with tour operators.

Unemployment remains relatively high, especially among youth, and economic opportunities are limited. This makes exploration activities particularly meaningful as they can provide short-term employment, skills training, and procurement opportunities for local service providers.

Cultural and Archaeological Resources

The Kunene Region is rich in cultural and archaeological heritage, including rock engravings, stone tool scatters, burial sites, and early settlement features. While no formal heritage resources have yet been documented within EPL 10024, the probability of encountering such resources cannot be ruled out due to the region's known archaeological significance.

The presence of heritage resources necessitates strict adherence to a chance-find procedure, ensuring immediate cessation of work and notification of heritage authorities if any artefacts or culturally significant materials are discovered.

Public Consultation Process

Public consultation is a central requirement of Namibia's Environmental Management Act (EMA, 2007) and the Environmental Impact Assessment Regulations of 2012, which emphasise transparency, accountability, and the meaningful participation of Interested and Affected Parties (I&APs) in environmental decision-making. The purpose of the consultation process is to ensure that all parties who may be influenced by, or have an interest in, the proposed exploration activities on EPL 10024 are informed about the project, given the opportunity to express their views, and made aware of the potential environmental and socio-economic implications. The consultation process is therefore designed to support informed decision-making by the Ministry of Environment, Forestry and Tourism (MEFT) and to foster trust, collaboration, and shared responsibility between FSN Mining (Pty) Ltd, conservancies, communities, government entities, and local stakeholders.

Consultation Approach and Methodology

The public consultation approach for this Environmental Scoping Study follows a **structured, inclusive, and transparent process** aligned with MEFT's guidelines. Augite Environmental Consultants cc, as the appointed Environmental Assessment Practitioner (EAP), is responsible for planning and executing the consultation programme, ensuring that all stakeholders are provided with accurate, accessible, and timely information.

The consultation process for EPL 10024 consists of several interlinked components:

1. **Early identification of Interested and Affected Parties (I&APs)**
2. **Preparation of a Background Information Document (BID)** summarising the project
3. **Distribution of written notices** to key stakeholders
4. **Publication of newspaper notices** announcing the commencement of the EIA process
5. **Direct engagement with local authorities and conservancy committees**
6. **Convening of public meetings** within accessible locations near the EPL

7.2 Identification of Interested and Affected Parties (I&APs)

Interested and Affected Parties were identified during the scoping stage through stakeholder mapping, consultation with regional authorities, and coordination with conservancy committees. I&APs include individuals, groups, organisations, and authorities whose rights, interests, or welfare may be affected by the project, as well as those with technical expertise or regulatory authority over natural resources.

Background Information Document (BID)

A comprehensive BID was distributed electronically and physically to key stakeholders. It included:

- The purpose of the exploration project
- A description of the EPL and target commodities
- Maps and site location
- The expected exploration techniques
- Potential impacts and proposed mitigation
- Contact details for registering as an I&AP

Incorporation of Public Concerns into the ESS

All submissions, comments, verbal inputs, and questions from I&APs will be formally recorded and included in the annexures of this ESS. Each concern is evaluated and responded to objectively by the EAP, and the project description, impact assessment, and mitigation measures are refined accordingly. This ensures that the consultation process is not a formality but a meaningful component that shapes the environmental assessment and strengthens the environmental stewardship of the proposed exploration activities.

Compliance with MEFT Requirements

The consultation programme has been designed to fully comply with the EMA and EIA Regulations by ensuring:

- Fair and accessible opportunities for all I&APs to participate
- Transparent communication of all project-related information

- Formal documentation of all consultation activities
- Inclusion of all comments in the final ESS and EMP
- Respect for community structures, customs, and decision-making processes

The process demonstrates FSN Mining's commitment to responsible, inclusive, and ethical exploration practices.

IMPACTS IDENTIFICATION, DESCRIPTION AND ASSESSMENT

The purpose of the impact assessment is to evaluate the potential environmental and socio-economic consequences that may arise from the proposed exploration activities on EPL 10024. The assessment considers the nature, extent, duration, intensity, reversibility, and likelihood of each identified impact. The aim is to determine the overall significance of impacts **before mitigation** and the residual significance **after mitigation measures** are implemented. This process enables informed decision-making and ensures that exploration activities are conducted responsibly, with due regard for environmental sustainability and community welfare.

The assessment recognises that the proposed project consists of **two distinct phases**—a non-intrusive exploration phase and an early-stage intrusive phase—and that impacts vary accordingly. While non-intrusive activities such as geological mapping, sampling, and geophysical surveys are expected to generate minimal disturbance, intrusive activities including pitting, trenching, and limited scout drilling introduce localised ground disturbance that requires careful consideration and management.

Approach to Impact Identification

Impacts were identified through a combination of:

1. **Desktop studies**, including review of regional environmental and socio-economic conditions
2. **Field observations** by the Environmental Assessment Practitioner
3. **Stakeholder input** received during public consultation
4. **Professional experience** with similar exploration projects in communal conservancy landscapes
5. **Legal and policy requirements**, including those related to biodiversity, heritage, and land use

Impacts have been grouped into three categories:

- **Biophysical impacts**
- **Socio-economic impacts**
- **Cultural and heritage impacts**

For each category, the assessment distinguishes between impacts associated with **non-intrusive** and **intrusive** activities.

Biophysical Impacts

Impact on Soil and Geological Substrate

Nature of Impact

Soil disturbance may occur during vehicle movement, pitting, trenching, and drill pad construction. These activities can lead to compaction, loosening of soil structure, and increased erosion risk, especially in areas with shallow, stony, or sandy soils. Disturbance to the geological substrate is minor and restricted to small excavation sites.

Extent, Duration & Significance

Without mitigation, soil disturbance is localised but may persist if left unrepaired, especially in erosion-prone areas. Impacts are rated **low to medium significance** before mitigation due to the small footprint of operations.

Mitigation Outlook

By restricting off-road driving, using existing tracks, minimising excavation, and rehabilitating all pits and trenches immediately after use, impacts can be reduced to **low significance**.

Impact on Vegetation and Habitat

Nature of Impact

Non-intrusive activities generally pose minimal risk to vegetation. Intrusive activities may require limited vegetation clearing for drill pads, trench alignments, or temporary access. Potential impacts include uprooting, trampling, or crushing of plants. Protected species such as *Welwitschia mirabilis*, Commiphora species, and slow-growing succulents may require strict avoidance.

Extent, Duration & Significance

Given the sparse vegetation in large portions of the EPL and the very small scale of exploration works, impacts are expected to be **site-specific and temporary**. Before mitigation, impacts are assessed as **medium significance** in sensitive areas or where protected flora may occur.

Mitigation Outlook

Avoidance of sensitive vegetation zones, careful micro-siting of drill pads, and strict enforcement of no-go areas reduce impacts to **low significance**.

Disturbance to Fauna and Wildlife Movements

Nature of Impact

Human presence, noise from vehicles and drilling, and increased movement along existing tracks may temporarily disturb wildlife. The EPL lies within conservancy land that supports desert-adapted species such as oryx, zebra, hyena, and occasionally elephants. These species may alter movement patterns in response to disturbance.

Extent, Duration & Significance

Disturbances are temporary and reversible, limited to small work teams and short-duration drill campaigns. Before mitigation, impacts are rated **low to medium significance**, particularly if activities intersect wildlife corridors or seasonal grazing routes.

Mitigation Outlook

Avoiding night-time work, enforcing speed limits, avoiding breeding seasons where possible, and training staff in wildlife awareness reduce impacts to **low significance**.

Noise Emissions

Nature of Impact

Noise may be generated by geological hammering, vehicle movement, generators, and drilling. Noise could disturb wildlife or create temporary nuisance effects if near grazing areas or walking routes.

Extent, Duration & Significance

Given the remoteness of EPL 10024 and the lack of permanent settlements inside the licence area, noise impacts are expected to be **highly localised and temporary**, with **low significance** before and after mitigation.

Dust Generation

Nature of Impact

Dust may be generated by movement of vehicles on gravel tracks and from excavation or drilling during dry, windy periods. Dust may affect visibility, vegetation surfaces, and wildlife.

Extent, Duration & Significance

Dust impacts are **localised**, intermittent, and short-term. Before mitigation, impact significance is **low** and can be further reduced by controlling speed and avoiding dusty work during strong winds.

Hydrocarbon Spills and Pollution Risks

Nature of Impact

Hydrocarbon spills may arise from vehicle leaks, refuelling, or drilling operations. Even small spills can contaminate soils, threaten vegetation, and affect drainage lines.

Extent, Duration & Significance

Given strict control measures, the likelihood of spills is low. Before mitigation, impacts are assessed as **low to medium significance** due to the sensitivity of soils and drainage lines.

Mitigation Outlook

With spill kits, drip trays, training, and immediate remediation, impacts reduce to **low significance**.

Socio-Economic Impacts

Employment and Local Economic Benefits (Positive Impact)

Nature of Impact

The project will create temporary employment for local residents, especially in roles such as field assistants, camp helpers, sample runners, and general labour. The purchase of goods and services from local suppliers will stimulate economic activity in Kamanjab, Anker, and Erwee.

Extent & Significance

This positive impact is **moderately significant**, with greatest benefits accruing to conservancy members and young jobseekers. The impact is fully positive and enhanced through local hiring policies.

Impact on Grazing and Livestock Movements

Nature of Impact

Conservancy land is used primarily for communal grazing. Exploration activities may temporarily restrict livestock movement around specific work areas, though the footprint is very small.

Impact Significance

Before mitigation, the impact is **low significance**, as the project does not involve fencing, permanent structures, or long-term exclusion zones.

Mitigation Outlook

By communicating locations of planned work to conservancy leadership and avoiding major grazing hotspots, impacts reduce to **very low significance**.

Community Expectations and Perceptions

Nature of Impact

Communities may expect long-term employment or mining development. Misunderstandings can create unrealistic expectations or distrust if not managed transparently.

Significance

This is a **medium significance** issue before mitigation.

Mitigation Outlook

Clear communication, awareness meetings, and honest dialogue reduce this to **low significance**.

Disruption to Tourism Activities

Nature of Impact

Tourism in the Torra–Anker landscape depends on wildlife viewing, scenic landscapes, and wilderness experiences. Exploration could temporarily affect tourism routes or create visual or noise disturbance.

Significance

Before mitigation: **low to medium**, depending on the proximity of work areas to tourism routes.

Mitigation Outlook

Scheduling work away from known tourist times/routes and minimising noise reduces impacts to **low significance**.

Cultural and Heritage Impacts

Disturbance to Archaeological Resources

Nature of Impact

The Kunene Region contains numerous rock engravings, stone tools, and cultural sites. Although no known heritage sites have been mapped within EPL 10024, the potential exists for accidental disturbance during trenching or drilling.

Impact Significance

Before mitigation: **medium significance**, given the irreplaceable value of heritage resources.

Mitigation Outlook

A strict **chance-find procedure**, staff awareness, and avoidance of historical features reduce impacts to **low significance**.

Overall Impact Significance Summary

After mitigation, **all impacts are assessed as LOW**, demonstrating that the project is environmentally acceptable when conducted responsibly.

The impact assessment concludes that:

- No irreversible environmental impacts are anticipated
- No displacement of communities or major land-use conflicts will occur
- No biodiversity loss is expected
- All impacts are localised, temporary, and manageable
- The project aligns with sustainable exploration practices

IMPACT ASSESSMENT METHODOLOGY

The purpose of the Impact Assessment Methodology is to provide a clear, systematic framework for identifying, predicting, evaluating, and ranking the potential environmental and socio-economic impacts associated with the proposed exploration activities on EPL 10024. This methodology follows the principles of the Environmental Management Act (EMA) of 2007, the EIA Regulations of 2012, and accepted international best-practice standards for environmental assessment. Applying a structured and transparent approach ensures that all relevant impacts are objectively considered, appropriately classified, and effectively communicated to decision-makers, stakeholders, and the proponent.

Overall Assessment Approach

The overall approach to impact assessment integrates:

1. **Desktop research** (regional environmental data, geological literature, aerial imagery, conservancy land-use data)
2. **Field observations** made during site visits and baseline assessments
3. **Stakeholder inputs** gathered during public consultation
4. **Professional judgement** based on experience in similar semi-arid environments
5. **Legal and policy requirements** relevant to biodiversity, heritage, water resources, land tenure, and conservancy management

Each potential impact is analysed in terms of its **nature**, **spatial extent**, **duration**, **intensity**, **probability**, and **significance**, both **before mitigation** and **after mitigation**.

Key Criteria for Impact Evaluation

Each impact is evaluated using the following standard criteria:

Nature of the Impact

This describes *what the impact is* and whether it is:

- **Positive** (beneficial outcomes such as employment)
- **Negative** (adverse outcomes such as habitat disturbance)
- **Direct** (resulting immediately from project activities)
- **Indirect** (arising from secondary or cumulative processes)
- **Cumulative** (interacting with other activities in the area)

Spatial Extent

The geographical area affected by an impact is classified as:

- **Site-specific**
  (confined to drill pads, trenches, or sampling points)
- **Localised**
  (confined within the EPL boundary or immediate surroundings)
- **Regional**
  (affecting the wider conservancy landscape or tourism routes)
- **National/International**
  (e.g., strategic mineral development benefits)

Duration of Impact

The timescale over which an impact will be experienced:

- **Short-term**
  (limited to the exploration period; weeks to months)
- **Medium-term**
  (persisting for several months after the project but reversible)

- **Long-term**
  (lasting beyond exploration phase; uncommon for exploration)
- **Permanent**
  (irreversible change; *not expected* in this project)

Intensity or Magnitude of Impact

This criterion indicates the severity of the impact:

- **Low**
  (minimal disturbance, no lasting effects)
- **Medium**
  (noticeable disturbance but reversible without long-term harm)
- **High**
  (significant disruption requiring major mitigation; unlikely for this project)

Probability or Likelihood of Occurrence

- **Low probability**
  (unlikely but possible)
- **Medium probability**
  (reasonable chance of occurring)
- **High probability**
  (almost certain to occur without mitigation)

Reversibility

This assesses whether the impact can be undone:

- **Fully reversible**
  (e.g. pits backfilled, soil cleaned after spill)

- **Partially reversible**
  (e.g. vegetation regrowth on disturbed ground)
- **Irreversible**
  (e.g. destruction of heritage features—*to be avoided entirely*)

Significance Rating

Impact significance is calculated by combining:

- **Extent**
- **Duration**
- **Intensity**
- **Probability**

These criteria are integrated into an overall significance rating:

Significance Categories

Significance Level	Description
Low	Minor impacts, short-term, reversible, easily mitigated. Environment can recover naturally.
Medium	Moderate impacts requiring specific mitigation; may persist for limited duration but remain manageable.
High	Serious impacts likely to cause long-term change; unacceptable unless alternative mitigation or avoidance is implemented.

For this project, *no high-significance impacts* are anticipated due to the small and temporary nature of exploration activities.

Assessment Before and After Mitigation

Each impact is assessed **twice**:

1. **Before mitigation (pre-mitigation significance):**
   Assesses the severity of the impact if no management measures were implemented.
2. **After mitigation (residual or post-mitigation significance):**
   Assesses the expected impact once recommended measures (e.g., rehabilitation, avoidance, staff training) are applied.

This dual assessment demonstrates the effectiveness of mitigation measures.

Cumulative Impacts

Cumulative impacts are considered where:

- Multiple exploration activities occur over time
- Project impacts coincide with **livestock movements**, **wildlife corridors**, or **tourism routes**
- Conservancy activities (e.g., bush clearing, water point provision) interact with exploration
- Regional development and mineral projects create combined pressures

Cumulative impacts are generally low for this project due to the **limited scale**, **short operational periods**, and **strict use of existing tracks**.

High-Level Methodology Summary

To ensure clarity, the impact assessment methodology follows these steps:

1. **Identify potential impacts** (biophysical, social, heritage)
2. **Describe each impact** in relation to project activities
3. **Evaluate impacts** using the criteria listed above
4. **Assign significance ratings** before mitigation
5. **Identify mitigation measures** that can avoid or minimise impacts
6. **Re-evaluate impacts** after mitigation to determine residual significance

7. **Document findings** clearly in the ESS and EMP
8. **Integrate stakeholder concerns** into impact prioritisation and mitigation planning

This systematic approach ensures that decision-makers understand not only the nature of potential impacts but also the effectiveness of mitigation in reducing them to acceptable levels.

Outcome of the Methodology

Applying this methodology to EPL 10024 demonstrated that—**with full implementation of the proposed mitigation measures—**all residual impacts fall within the **low significance** category.

No high-impact, irreversible, or unacceptable environmental risks were identified.

Mitigation Measures

The purpose of this section is to ensure that all potential environmental and social impacts associated with exploration activities on EPL 10024 are effectively avoided, minimised, or managed. FSN Mining (Pty) Ltd is committed to conducting exploration activities responsibly and in a manner that maintains the ecological integrity, cultural heritage, and socio-economic values of the Torra and Anker Conservancies. The mitigation measures outlined below represent a comprehensive and proactive environmental management approach that aligns with Namibia's Environmental Management Act (2007), EIA Regulations (2012), and applicable international best-practice standards.

Mitigation measures are grouped according to the major impact categories identified during the environmental assessment process: **soil and land disturbance**, **vegetation and biodiversity**, **surface and groundwater**, **air quality and noise**, **waste and pollution management**, **heritage and archaeology**, and **socio-economic considerations**. These measures will form the foundation of the Environmental Management Plan (EMP) and must be adhered to throughout all phases of exploration.

Mitigation of Soil and Land Disturbance

Soils within the EPL are thin, fragile, and highly susceptible to erosion when disturbed. To prevent long-term degradation of the landscape:

Avoidance and Minimisation of Disturbance

- Exploration teams must use existing tracks and paths at all times.
- Off-road driving is strictly prohibited unless absolutely necessary for safety or access to sampling sites.
- Drill pad locations must be chosen on flat, naturally open ground to avoid unnecessary soil clearance.
- Excavations for pitting and trenching must be kept to the minimum size required for geological observations.

Rehabilitation of Disturbed Areas

- All pits and trenches must be **backfilled immediately** after sampling.
- Backfilling must restore land to its natural contour to avoid depressions that could cause runoff concentration and erosion.
- Compacted soils must be loosened manually to allow vegetation to re-establish naturally.
- Drill sumps must be collapsed and backfilled once drilling is completed.

Erosion Prevention

- No excavation should occur during or immediately after heavy rainfall events.
- Areas prone to erosion or steep slopes are to be avoided during site selection.
- If minor erosion starts to form, corrective measures—such as placement of brush or rocks—must be used to stabilise the area.

Mitigation of Vegetation and Biodiversity Impacts

The vegetation and wildlife of the EPL form part of a sensitive arid ecosystem and are essential to the conservancy-based tourism economy.

Protection of Vegetation

- Areas with protected plant species such as *Welwitschia mirabilis*, Commiphora species, or succulents must be designated **no-go zones**.
- No collection of firewood, plant material, or seeds by exploration personnel is allowed.
- Vegetation clearing for drill pads or temporary camps must be avoided where possible and kept minimal where unavoidable.
- Tracks showing signs of vegetation regrowth should be avoided and new disturbances should not be created.

Wildlife Protection

- Speed limits of **30 km/h** within the EPL must be enforced to reduce wildlife-vehicle collisions.

- Wildlife sightings must be recorded, particularly elephants, to help plan safe movement of vehicles and equipment.
- Exploration must avoid areas known for high wildlife activity, especially near drainage lines or grazing hotspots.
- No night driving should occur unless in emergencies, as it increases the risk of animal collisions.
- Personnel must not feed, chase, or interfere with wildlife in any manner.

Avoidance of Sensitive Habitats

- Ephemeral drainage lines, natural springs, and rocky outcrops used by wildlife must be avoided during drill pad or trench siting.
- Wildlife corridors identified by conservancy rangers must be respected.

Mitigation of Surface Water and Groundwater Impacts

Although no permanent surface water bodies exist on EPL 10024, protection of ephemeral drainage lines and groundwater resources is crucial.

Water Use and Management

- No groundwater abstraction is permitted within the EPL; all water must be brought from external suppliers.
- Water use during drilling must be monitored and minimised to prevent wastage.

Protection of Drainage Lines

- No excavations or drill pads may be placed within or directly adjacent to ephemeral drainage channels.
- Fuel storage and refuelling must be conducted at least **50 m away** from drainage depressions.
- Spill prevention measures (drip trays, absorbent pads) must be in place at all times.

Contamination Prevention

- Drilling fluid sumps must be lined if near sensitive soil types and must be rehabilitated immediately after drilling.
- All lubricants, diesel, oil, or chemicals must be stored in sealed containers within bunded areas or on impervious surfaces.

Mitigation of Air Quality and Noise Impacts

While impacts on air quality and noise are expected to be localised and temporary, the following measures will further minimise disturbance:

Dust Control

- Vehicle speeds on gravel roads must be reduced to minimise dust emissions.
- Dust-generating activities must be suspended during periods of strong winds.
- Unnecessary vehicle idling must be avoided.

Noise Control

- Exploration hours should be limited to daytime (06h00–18h00).
- Drilling operations must avoid the early morning or late evening when wildlife movement is more active.
- Equipment and generators must be fitted with effective silencers.

Waste and Pollution Management

Pollution prevention is essential in maintaining environmental quality within the conservancies.

General Waste Management

- All waste must be collected daily, stored securely, and transported offsite for disposal at approved facilities.
- No waste may be buried, burned, or discarded on the EPL.

- Littering of plastic, food scraps, or packaging is strictly prohibited.

Hazardous Waste Management

- Used oil, filters, oily rags, and contaminated soils must be collected and transported to approved disposal facilities.
- Spill kits must be carried in all exploration vehicles and at drilling sites.
- Any spill, regardless of size, must be attending to immediately and documented.

Sanitation and Hygiene

- If temporary field camps are established, chemical toilets must be provided and serviced regularly.
- Toileting in the veld is strictly prohibited.

Heritage and Archaeological Protection

The Kunene Region's archaeological richness necessitates careful monitoring during exploration.

Chance-Find Procedure

- If stone tools, pottery, rock engravings, or bone fragments are discovered, work must cease immediately.
- The site must be protected and the National Heritage Council notified.
- Work may only resume once approval is granted.

Awareness Training

- Field teams must be trained to recognise potential heritage materials.
- Known sensitive sites must be avoided entirely.

Socio-Economic Mitigation Measures

Stakeholder Engagement

- Continuous communication with the Torra and Anker Conservancy committees is essential.
- Work locations, schedules, and expected disturbances must be shared before exploration begins.
- A grievance mechanism must be established for community concerns.

Local Employment and Skills Development

- FSN Mining commits to prioritising employment of local residents where possible.
- On-the-job training will be provided for field assistant roles.
- Gender and youth inclusion should be emphasised.

Avoiding Livestock Disruption

- Exploration sites must avoid active grazing areas and water points.
- Livestock movement routes identified by farmers must be respected.
- Vehicle movement must consider roaming livestock and herders.

Respect for Local Culture

- Field teams must respect local customs, language preferences, and traditional authority structures.
- Community sites such as cemeteries or cultural landmarks must be avoided.

Monitoring and Enforcement of Mitigation Measures

Environmental Monitoring

- The EAP or designated environmental officer must conduct weekly inspections during active fieldwork.

- Monitoring must focus on rehabilitation success, erosion, waste management, and wildlife disturbance.

Compliance Enforcement

- Any non-compliance must be corrected immediately.
- Repeated non-compliance must be reported to conservancy leadership and MEFT as required.

Record Keeping

- All environmental incidents, including spills, wildlife encounters, grievances, and rehabilitation actions, must be documented.

Overall Mitigation Outlook

When fully implemented, the mitigation measures outlined above ensure that:

- All impacts remain **localised, temporary, and reversible**
- The project aligns with **best-practice environmental standards**
- Conservancy values and wildlife corridors are protected
- Community support is maintained through transparency and inclusion
- No long-term negative environmental or social impacts occur

These measures form the operational backbone of the Environmental Management Plan (EMP) and will guide all exploration activities on EPL 10024.

Conclusion and Recommendations

This Environmental Scoping Study (ESS) has evaluated the proposed early-stage exploration activities by FSN Mining (Pty) Ltd on Exclusive Prospecting Licence (EPL) 10024, situated within the Torra and Anker Conservancies in the Kunene Region. EPL 10024 covers a significant land area of 48,721 hectares characterised by rugged metamorphic terrain, arid savannah vegetation, and ecologically sensitive wildlife habitats. The study has thoroughly investigated the likely biophysical, socio-economic, cultural, and heritage implications of the proposed exploration programme, which includes both non-intrusive activities (mapping, sampling, ground geophysics) and limited intrusive methods (pitting, trenching, and scout drilling).

The assessment confirms that exploration activities are **small in scale, temporary in duration, and spatially restricted**. They are designed to be flexible and low-impact, with a strong emphasis on environmental stewardship and compliance with the Environmental Management Act (2007) and EIA Regulations (2012). The project area lies within conservancy land that supports community-based natural resource management, wildlife conservation, tourism operations, and communal grazing. These sensitivities require a careful and balanced approach. The study concludes that, with proper implementation of the recommended mitigation measures and adherence to the Environmental Management Plan (EMP), no **significant, long-term, or irreversible** adverse impacts are anticipated.

Biophysical impacts—such as disturbance to soils, vegetation, and wildlife—are expected to be limited to the immediate footprint of pitting, trenching, and drilling areas and will be temporary and reversible. The assessment demonstrated that impacts on biodiversity, including protected plant species and wildlife movement corridors, can be effectively mitigated through avoidance of sensitive habitats, adherence to existing tracks, and immediate rehabilitation of disturbed areas. Potential pollution risks, including hydrocarbon spills, can be managed through proper handling of fuels, use of spill kits, bunding, and strict housekeeping practices. Noise and dust impacts are generally minor due to the remote location and small scale of operations.

Socio-economic impacts of the project are largely positive, especially regarding **temporary employment, procurement opportunities, and strengthened collaboration with conservancy structures**. Exploration activities contribute to local economic development while supporting national goals of mineral diversification and strategic resource development

aligned with Vision 2030, the Harambee Prosperity Plan, and the green energy transition. Stakeholder engagement has been central to this ESS and has highlighted the importance of maintaining open communication, managing community expectations, and ensuring that local voices are integral to the project's planning and implementation. Engagement with the Torra and Anker Conservancies, traditional authorities, and local residents has demonstrated that exploration is broadly acceptable, provided it is conducted responsibly, transparently, and with respect for local land uses.

Importantly, **no fatal flaws** were identified during the Scoping process. The proposed activities comply with Namibia's environmental legislation, align with local land-use objectives, and uphold the principles of sustainable development. Exploration is inherently low-impact and reversible, meaning that should results not warrant further investigation, the area can return quickly to its natural state without long-term disturbance.

Based on the findings of the ESS, early-stage exploration activities on EPL 10024 are considered **environmentally and socially acceptable**.

Recommendations

Based on the environmental findings, public consultation outcomes, and anticipated impacts of the proposed exploration programme, the following recommendations are provided to guide FSN Mining (Pty) Ltd and the Ministry of Environment, Forestry and Tourism (MEFT) in their decision-making:

Issuance of the Environmental Clearance Certificate

It is recommended that MEFT **approve the project and issue an Environmental Clearance Certificate (ECC)** for the proposed exploration activities, subject to strict compliance with the Environmental Management Plan and mitigation measures outlined in this ESS.

Implementation of the Environmental Management Plan (EMP)

The EMP must be implemented in full throughout all stages of the exploration programme. FSN Mining should appoint a qualified Environmental Control Officer (ECO) to oversee compliance during active field operations, conduct routine inspections, and maintain records of environmental performance.

Protection of Sensitive Ecological Areas

Exploration teams must avoid sensitive ecological zones, including—

- Areas containing *Welwitschia mirabilis* or other protected species
- Wildlife corridors frequently used by conservancy-managed fauna
- Ephemeral drainage lines and riparian vegetation
- Areas near tourism routes or photographic viewpoints

These avoidance measures are central to ensuring compatibility with conservancy land-use plans.

Local Employment and Capacity Building

Where possible, FSN Mining should prioritise the hiring of local residents for semi-skilled and unskilled work. Skills transfer—through training in sampling, mapping assistance, camp management, or field logistics—should be provided to promote capacity building within the community. This will enhance project acceptance and local socio-economic benefits.

Waste and Pollution Control

All waste (domestic and hazardous) must be removed from site and disposed of at authorised facilities. Refuelling must occur on impervious surfaces or drip trays, and spill kits must accompany all vehicles and drilling sites. Strict adherence to pollution prevention measures is non-negotiable.

Rehabilitation of Disturbed Areas

All pits, trenches, drill pads, and sumps must be backfilled and rehabilitated immediately after use. Rehabilitation must restore natural contours and allow for natural vegetation recovery. Monitoring of rehabilitated areas should continue until they are stable.

Heritage Protection

FSN Mining must enforce a **chance-find procedure**, and all staff must be trained to recognise heritage materials. Work must stop immediately if any archaeological resources are discovered, and the National Heritage Council must be consulted for further guidance.

Monitoring and Reporting

FSN Mining must develop and maintain an **environmental monitoring programme** to track compliance with mitigation measures. Records of incidents, wildlife encounters, stakeholder grievances, and rehabilitation activities must be included in environmental reports submitted to MEFT and the conservancies upon request.

Final Statement

The proposed exploration programme on EPL 10024, as outlined by FSN Mining (Pty) Ltd and evaluated in this Environmental Scoping Study, is considered both **environmentally feasible** and **socially responsible**. With full adherence to the Environmental Management Plan, active stakeholder collaboration, and careful planning to avoid ecologically and culturally sensitive areas, the project can proceed without causing undue harm to the environment or local communities.

Exploration represents a vital step in unlocking Namibia's potential for strategic minerals essential for national development and global energy transitions. The findings of this ESS demonstrate that the project can be carried out in harmony with the conservancy ethos, communal land uses, and the socio-economic aspirations of the region.

On this basis, it is recommended that the **Environmental Clearance Certificate be granted**, enabling FSN Mining (Pty) Ltd to proceed with exploration activities in an orderly, responsible, and sustainable manner.

Annexures

A full set of annexures will accompany the finalised version of this ESS. These include maps showing the EPL boundary, site photographs, geological layouts, a stakeholder register, proof of public notices, copies of meeting attendance registers, and a comprehensive comments-and-responses document. The Environmental Management Plan (EMP) will be appended as a separate document or as a dedicated annexure, depending on MEFT requirements.

Appendix


meru
Kamanjab
Ann's Lodge
Selfcatering & Camping


Kamanjab
Village


Kamarijab
Village
Council

Kamanjab Village Council
Chief Executive Officer
18 SEP 2025

AUGITE
ENVIRONMENTAL CONSULTANCY CC
Tel:+264 67 330954
Cell: 081 963 0951
PO Box 81 Kamanjab

To:
The Chief Executive Officer
Kamanjab Town Council
P.O. Box
Kamanjab, Namibia

Email:

Date: 5 September 2025

Re: ***Notification of Environmental Impact Assessment (EIA) Process for Proposed Exclusive Prospecting Licence (EPL) 10024 in Kunene Region***

Dear Sir/Madam,

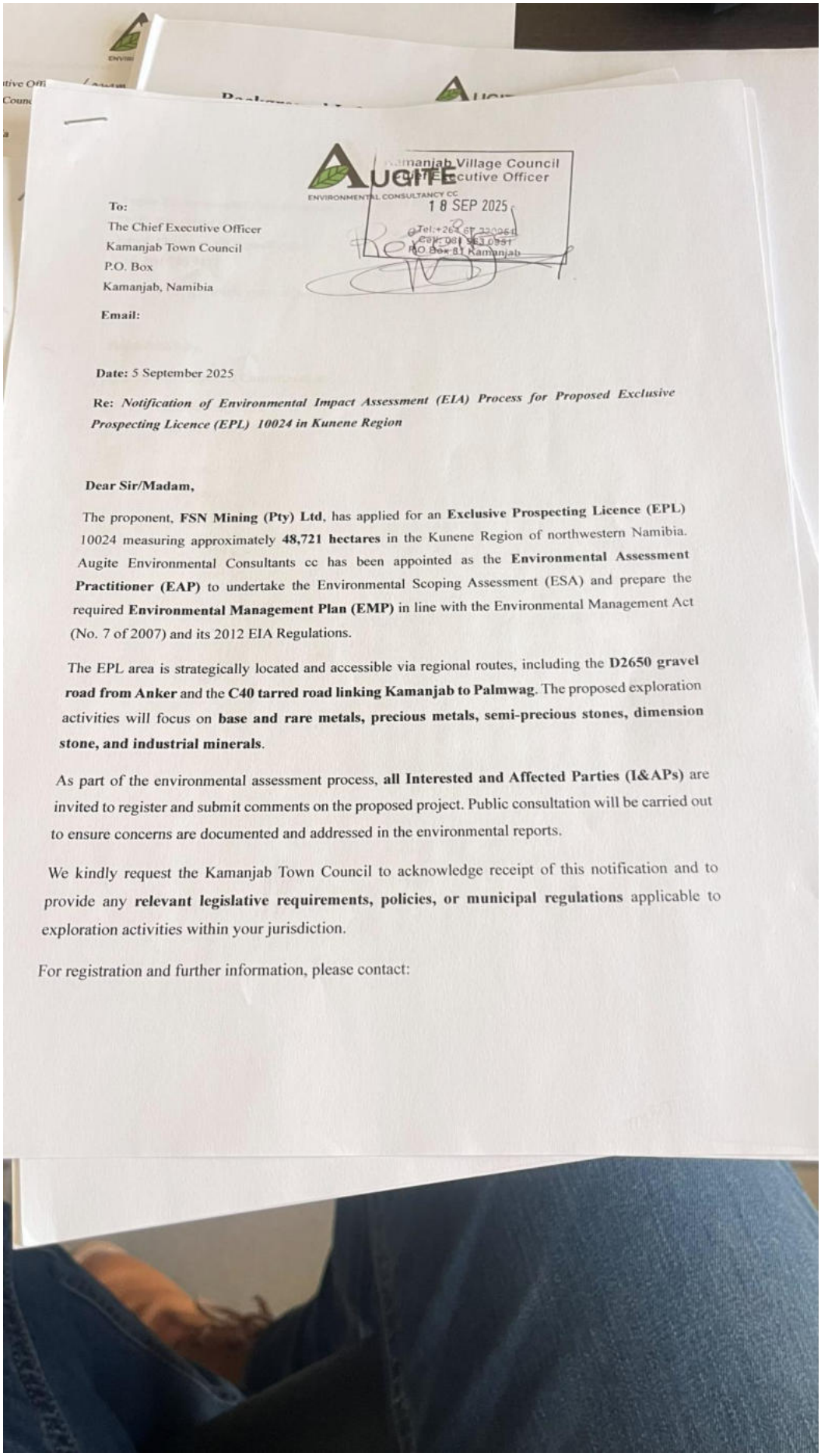
The proponent, **FSN Mining (Pty) Ltd**, has applied for an **Exclusive Prospecting Licence (EPL)** 10024 measuring approximately **48,721 hectares** in the Kunene Region of northwestern Namibia. Augite Environmental Consultants cc has been appointed as the **Environmental Assessment Practitioner (EAP)** to undertake the Environmental Scoping Assessment (ESA) and prepare the required **Environmental Management Plan (EMP)** in line with the Environmental Management Act (No. 7 of 2007) and its 2012 EIA Regulations.

The EPL area is strategically located and accessible via regional routes, including the **D2650 gravel road from Anker** and the **C40 tarred road linking Kamanjab to Palmwag**. The proposed exploration activities will focus on **base and rare metals, precious metals, semi-precious stones, dimension stone, and industrial minerals**.

As part of the environmental assessment process, **all Interested and Affected Parties (I&APs)** are invited to register and submit comments on the proposed project. Public consultation will be carried out to ensure concerns are documented and addressed in the environmental reports.

We kindly request the Kamanjab Town Council to acknowledge receipt of this notification and to provide any **relevant legislative requirements, policies, or municipal regulations** applicable to exploration activities within your jurisdiction.

For registration and further information, please contact:



Kamanjab Village Council
Chief Executive Officer
18 SEP 2025

AUGITE
ENVIRONMENTAL CONSULTANCY CC
Tel: +264 61 220264
Cell: 081 963 0951
PO Box 81 Kamanjab

To:
The Chief Executive Officer
Kamanjab Town Council
P.O. Box
Kamanjab, Namibia

Email:

Date: 5 September 2025

Re: ***Notification of Environmental Impact Assessment (EIA) Process for Proposed Exclusive Prospecting Licence (EPL) 10024 in Kunene Region***

Dear Sir/Madam,

The proponent, **FSN Mining (Pty) Ltd**, has applied for an **Exclusive Prospecting Licence (EPL)** *10024* measuring approximately **48,721 hectares** in the Kunene Region of northwestern Namibia. Augite Environmental Consultants cc has been appointed as the **Environmental Assessment Practitioner (EAP)** to undertake the Environmental Scoping Assessment (ESA) and prepare the required **Environmental Management Plan (EMP)** in line with the Environmental Management Act (No. 7 of 2007) and its 2012 EIA Regulations.

The EPL area is strategically located and accessible via regional routes, including the **D2650 gravel road from Anker** and the **C40 tarred road linking Kamanjab to Palmwag**. The proposed exploration activities will focus on **base and rare metals, precious metals, semi-precious stones, dimension stone, and industrial minerals**.

As part of the environmental assessment process, **all Interested and Affected Parties (I&APs)** are invited to register and submit comments on the proposed project. Public consultation will be carried out to ensure concerns are documented and addressed in the environmental reports.

We kindly request the Kamanjab Town Council to acknowledge receipt of this notification and to provide any **relevant legislative requirements, policies, or municipal regulations** applicable to exploration activities within your jurisdiction.

For registration and further information, please contact:

AUGITE
ENVIRONMENTAL CONSULTANCY CC

Kamanjab Village Council
Chief Executive Officer
18 SEP 2025
Tel:+264 67 230961
Cell: 081 283 0951
P.O. Box 81 Kamanjab

To:
The Chief Executive Officer
Kamanjab Town Council
P.O. Box
Kamanjab, Namibia

Email:

Date: 5 September 2025

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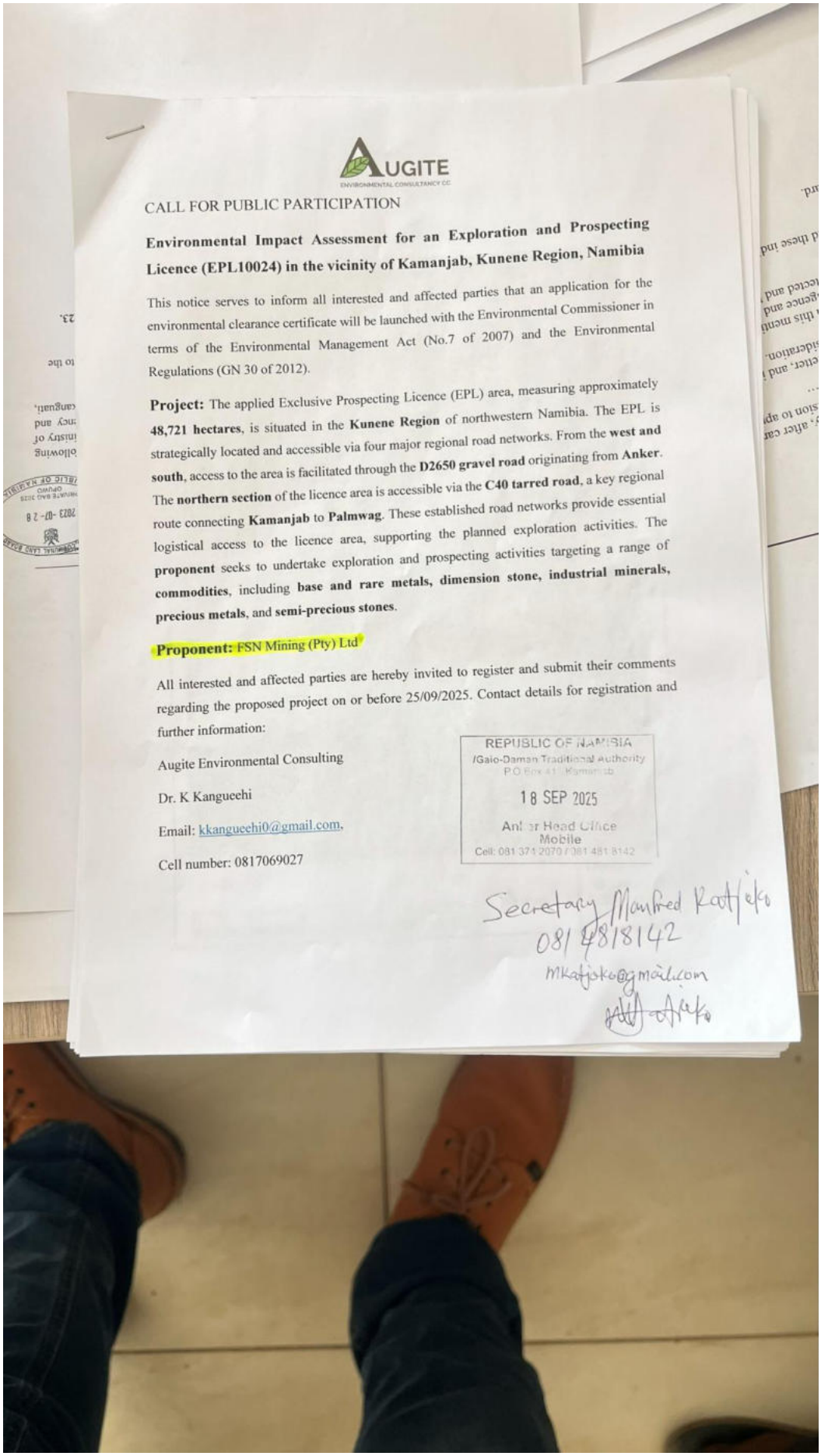

AUGITE
ENVIRONMENTAL CONSULTANCY CC

CALL FOR PUBLIC PARTICIPATION

Environmental Impact Assessment for an Exploration and Prospecting Licence (EPL10024) in the vicinity of Kamanjab, Kunene Region, Namibia

This notice serves to inform all interested and affected parties that an application for the environmental clearance certificate will be launched with the Environmental Commissioner in terms of the Environmental Management Act (No.7 of 2007) and the Environmental Regulations (GN 30 of 2012).

Project: The applied Exclusive Prospecting Licence (EPL) area, measuring approximately **48,721 hectares**, is situated in the **Kunene Region** of northwestern Namibia. The EPL is strategically located and accessible via four major regional road networks. From the **west and south**, access to the area is facilitated through the **D2650 gravel road** originating from **Anker**. The **northern section** of the licence area is accessible via the **C40 tarred road**, a key regional route connecting **Kamanjab** to **Palmwag**. These established road networks provide essential logistical access to the licence area, supporting the planned exploration activities. The **proponent** seeks to undertake exploration and prospecting activities targeting a range of **commodities**, including **base and rare metals, dimension stone, industrial minerals, precious metals**, and **semi-precious stones**.

Proponent: FSN Mining (Pty) Ltd

All interested and affected parties are hereby invited to register and submit their comments regarding the proposed project on or before 25/09/2025. Contact details for registration and further information:

Augite Environmental Consulting

Dr. K Kangueehi

Email: kkangueehi0@gmail.com,

Cell number: 0817069027

REPUBLIC OF NAMIBIA
/Gaio-Daman Traditional Authority
P.O Box 41, Kamanjab
18 SEP 2025
Anker Head Office
Mobile
Cell: 081 371 2070 / 081 481 8142

Secretary Manfred Katjeko
081 4818142
mkatjeko@gmail.com

To:

The Traditional Chief

≠Khoadi //Hoas Conservancy.

P.O. Box

Kamanjab, Namibia

Email: kh.conservancy@gmail.com

081549758 3

Date: 5 September 2025

Re: Request for Acknowledgement – Environmental Impact Assessment (EIA) for Exclusive Prospecting Licence (EPL) in Kunene Region

Dear Sir/Madam,

This serves to formally notify the **Kamanjab Town Council** that **[Insert Company/Proponent Name]** has applied for an **Exclusive Prospecting Licence (EPL)** covering approximately **48,721 hectares** in the Kunene Region. The EPL area is accessible via the **C40 tarred road linking Kamanjab to Palmwag** as well as the **D2650 gravel road from Anker**.

Augite Environmental Consultants cc has been appointed to conduct the **Environmental Scoping Assessment (ESA)** and prepare the required **Environmental Management Plan (EMP)** in accordance with the Environmental Management Act (No. 7 of 2007) and the EIA Regulations of 2012.

We respectfully request your office to provide a **formal acknowledgement letter** confirming that the Kamanjab Town Council has been informed of this EIA process.

For further information, please contact:

Augite Environmental Consultants cc

Dr. K. Kangueehi

Email: **kkangueehi0@gmail.com**

Cell: **081 706 9027**

We appreciate your cooperation and look forward to your confirmation.

AUGITE
ENVIRONMENTAL CONSULTANCY CC

To:

The Traditional Chief

≠Khoadi //Hoas Conservancy.

P.O. Box

Kamanjab, Namibia

Email: kh.conservancy@gmail.com
0815497583

Date: 5 September 2025

Re: Request for Acknowledgement – Environmental Impact Assessment (EIA) for Exclusive Prospecting Licence (EPL) in Kunene Region

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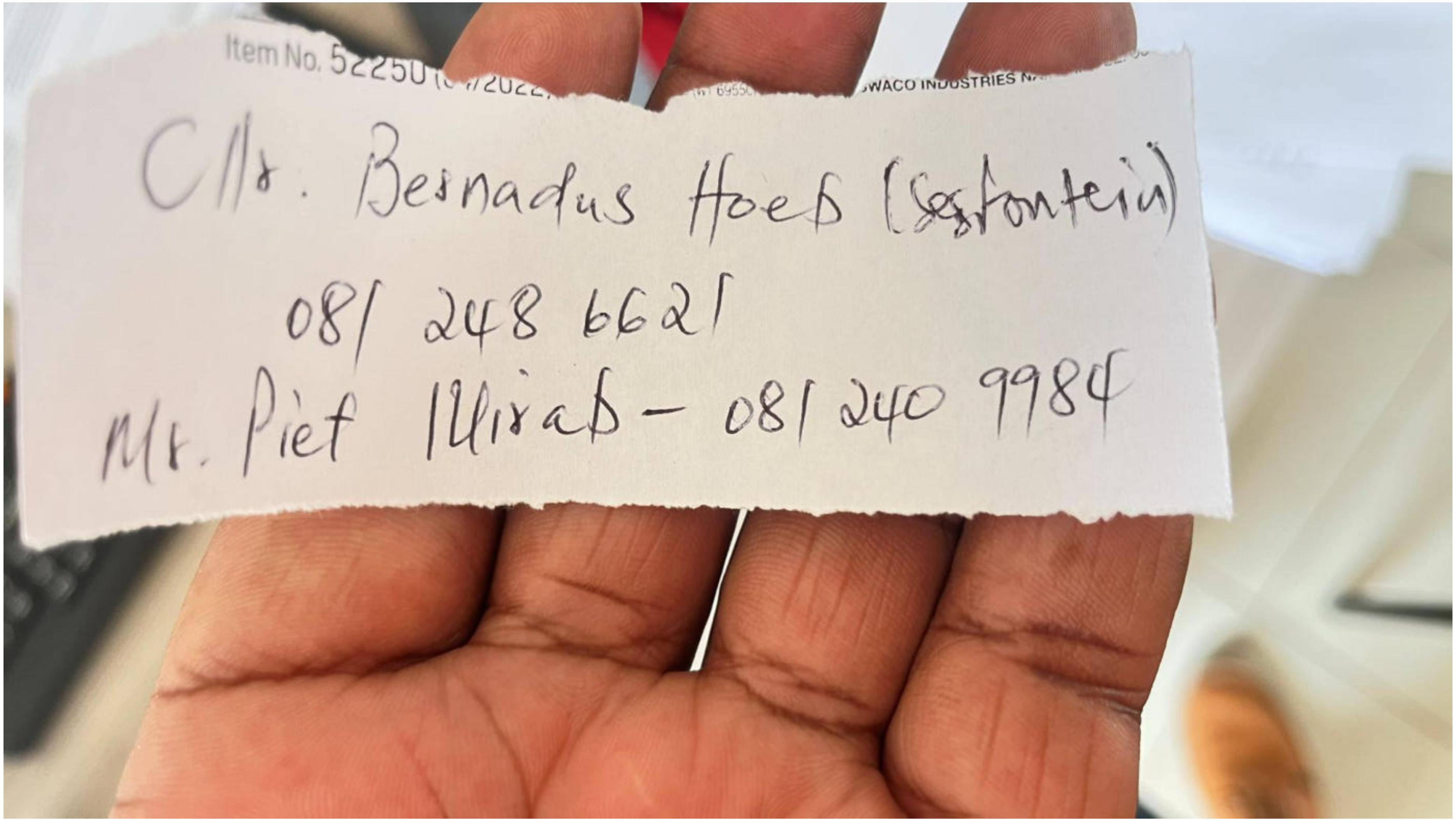
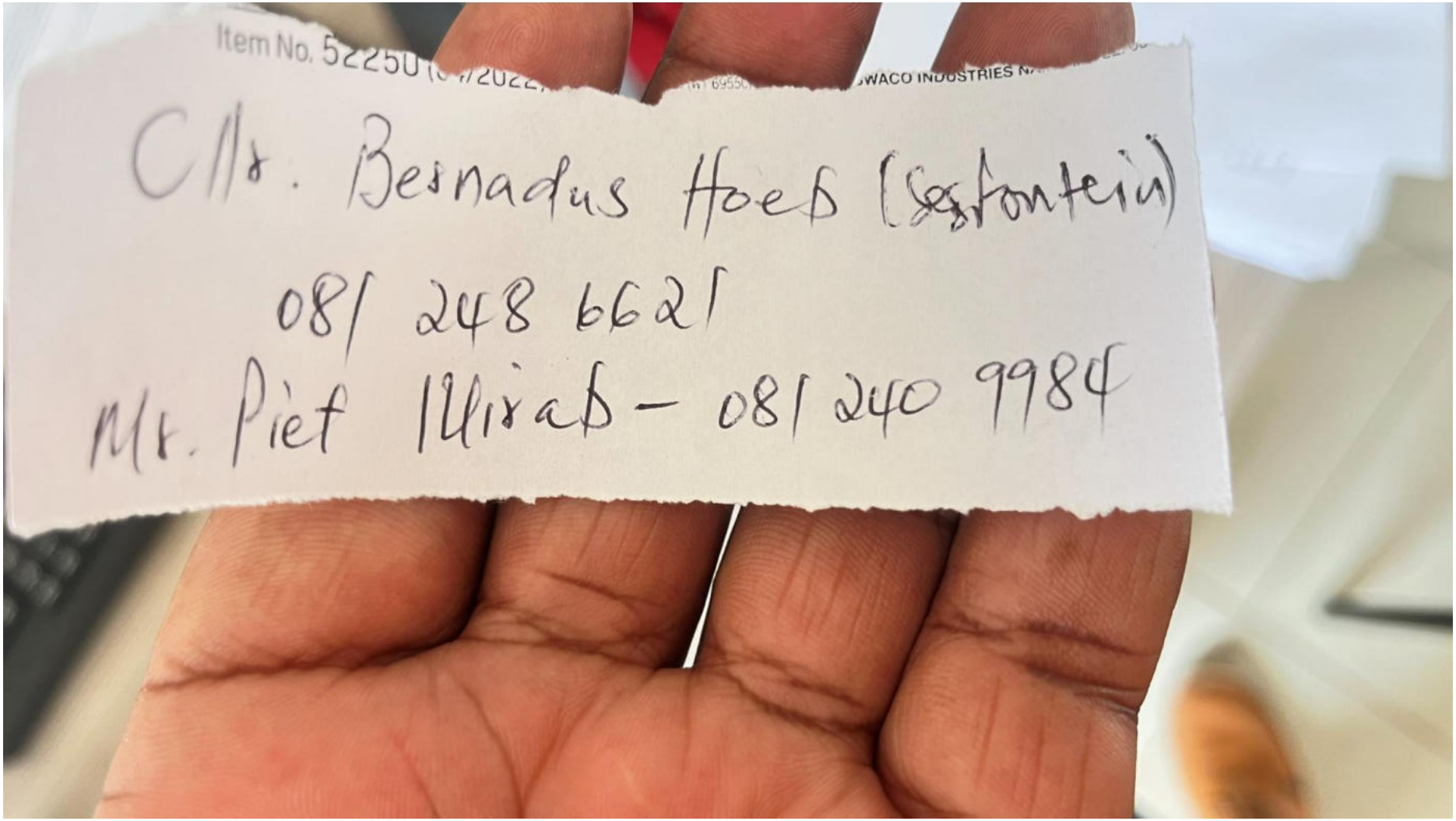

Item No. 52250

Cllr. Bernadus Hoeb (Sesfontein)
081 248 6621
Mr. Piet Ulirab - 081 240 9984


C/lr. Bernadus Hoek (Eastfontein)
081 248 6621
Mr. Piet Illiab - 081 240 9984


/GAIO-DAMAN
TRADITIONAL AUTHORITY
HEAD OFFICE ANKER
UNDER THE LEADERSHIP OF
CHIEF JOSEF MAX HARASEB
IN AUGURATED BY
HON. MINISTER
ERASTUS UUTONI
MINISTER OF
URBAN AND RURAL
DEVELOPMENT.
DATE: 25 NOVEMBER 2023
GOD BE THE GLORY
UNITY
LIBERTY
JUSTICE


/GAIO-DAMAN
TRADITIONAL AUTHORITY
HEAD OFFICE ANKER
UNDER THE LEADERSHIP OF
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UNITY
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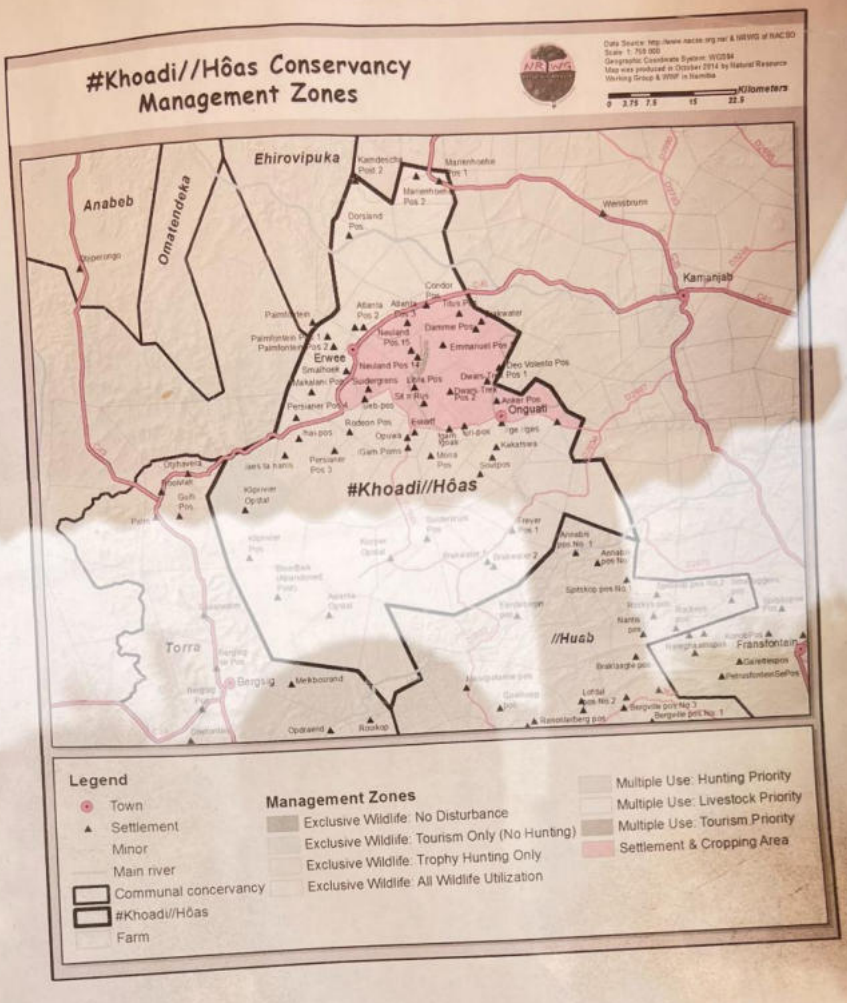
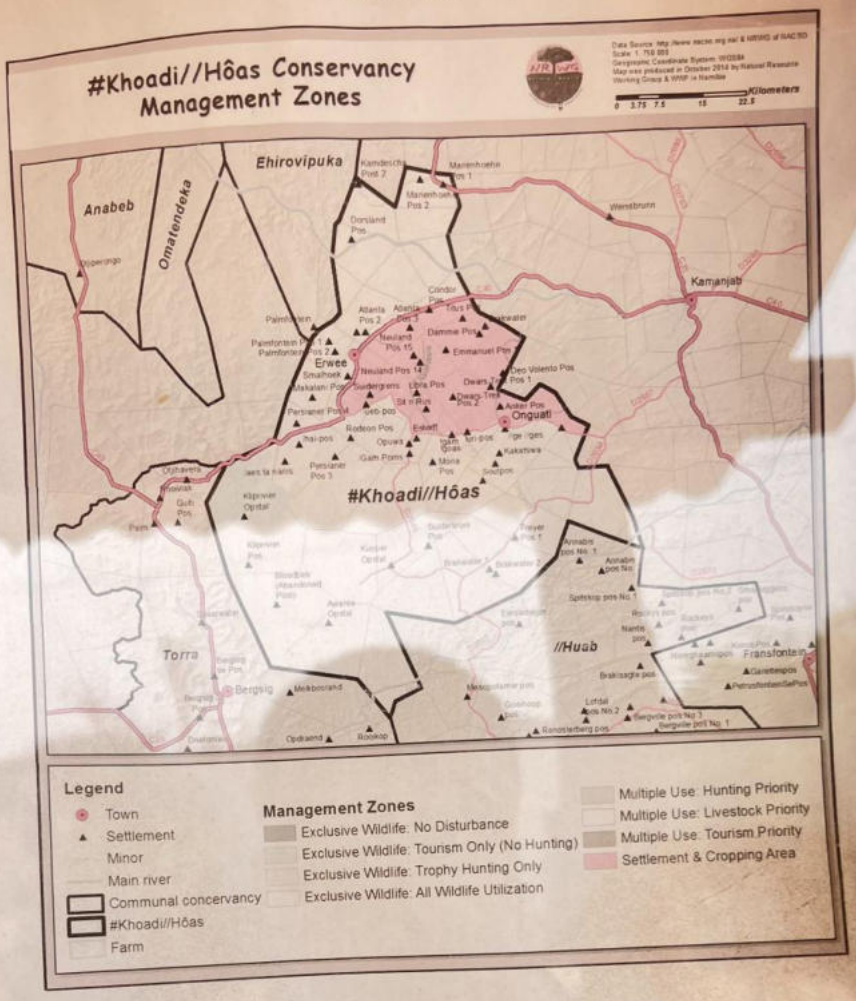
JUSTICE

"Elephants Corner"
CONSERVANCY



"Elephants Forever"
CONSERVANCY




KHOASI TIHOAS
Elephants Corner
CONSERVANCY OFFICE
P.O BOX 118
KAMANJAB
NAMIBIA


KHOASI TIHOAS
Elephants Corner
CONSERVANCY OFFICE
P.O BOX 118
KAMANJAB
NAMIBIA


This ≠Khoadi //hoas Conservancy Office
Complex was officially inaugurated by
The Honorable Governor of the
Kunene Region Dudu Murorua
on
12th November 2010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Complex was officially inaugurated by
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Kunene Region Dudu Murorua
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12th November 2010


meru
Kamanjab
Standard Bank
Ann's Lodge
Selfcatering & Camping