PROPOSED EXPLORATION ACTIVITIES OF GIB MINING NAMIBIA (PTY) LTD IN EPL 9924

ENVIRONMENTAL SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT

PREPARED FOR:

GIB MINING NAMIBIA (PTY) LTD

AUGUST 2024

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Report Title	ENVIRONMENTAL SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED EXPLORATION ACTIVITIES OF GIB MINING NAMIBIA (PTY) LTD IN EPL 9924
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Client	GIB Mining Namibia (Pty) ltd
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EXECUTIVE SUMMARY

1. Introduction

GIB Mining Namibia (Pty) ltd (GIB Mining) is the Namibian registered company of Gibb River Diamonds Limited of Australia. The company is busy developing the Ellendale diamond project and Edjudina gold project in Australia.

In Namibia GIB Mining has acquired six Exclusive Prospecting Licenses (EPLs) covering 1,828 km^2, two of which are in the Erongo Region. On these two – EPL 9924 and EPL 10131 – GIB Mining intends to conduct exploration activities for nuclear fuel minerals. Both EPLs are located within the Namib Naukluft National Park (NNNP), east of Swakopmund and between the C28 and C14 main roads (see Figure A).

EPL 9924 is about 110 km from Swakopmund, just south of Hotsas. EPL 10131 is further east, southeast of Gemsbokwater and close to the eastern boundary of the park. Both the waterholes at Hotsas and Gemsbokwater are less than 1 km from the EPLs. Ganab (Campsite) is 8 km southwest from EPL10131 and Tumas View is 13 km southwest of EPL 9924. Access from the C28 road via existing park roads is possible to both EPLs.

Both EPLs are relatively small - EPL 9924 is 1,535 ha and EPL 10131 is 3,227 ha in size, i.e. a total of 47.6 km^2. Exploration activities are proposed in targeted areas only and will commence as soon possible, on both EPLs, depending on the decision by the Ministry of Environment, Forestry and Tourism (MEFT) and the issuing of Environmental Clearance Certificates (ECCs).

This Executive Summary is of the Environmental Scoping (including impact assessment) Report for EPL 9924.

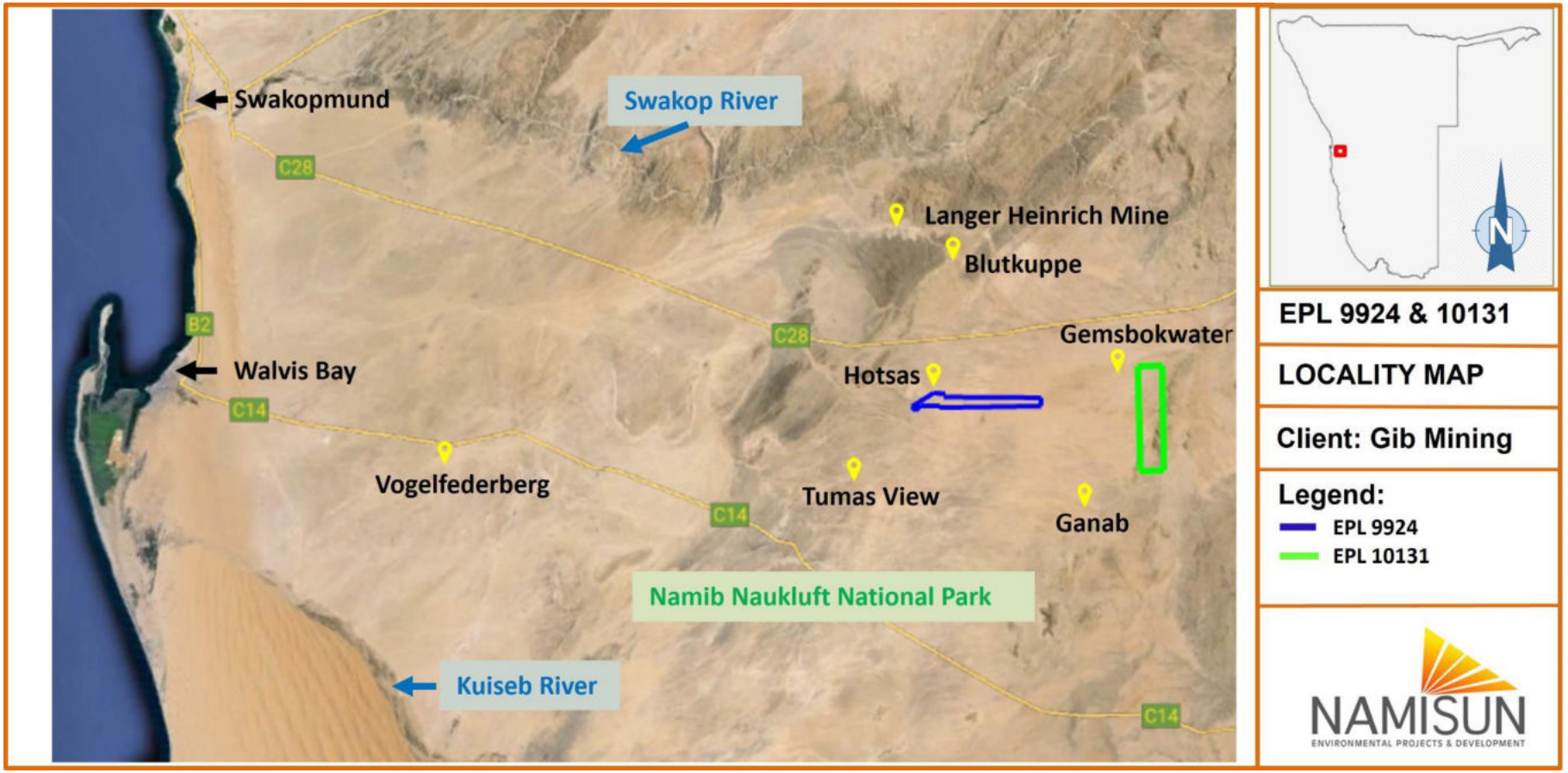

FIGURE A: LOCATION OF EPL 9924 AND 10131

2. Environmental Impact Assessment process

Prior to the commencement of the proposed exploration activities on the two EPLs, environmental clearance is required from the regulatory authority, the MEFT in terms of the Environmental Management Act, 7 of 2007. This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and its associated regulations were promulgated in January 2012 (Government Gazette No. 4878).

Namisun Environmental Projects and Development (Namisun) was appointed by GIB Mining as an independent environmental consulting company to undertake the required EIA process, to compile a Scoping (including an impact assessment) Report and accompanying EMP for each of the two EPLs as part of the application process for an ECC for each.

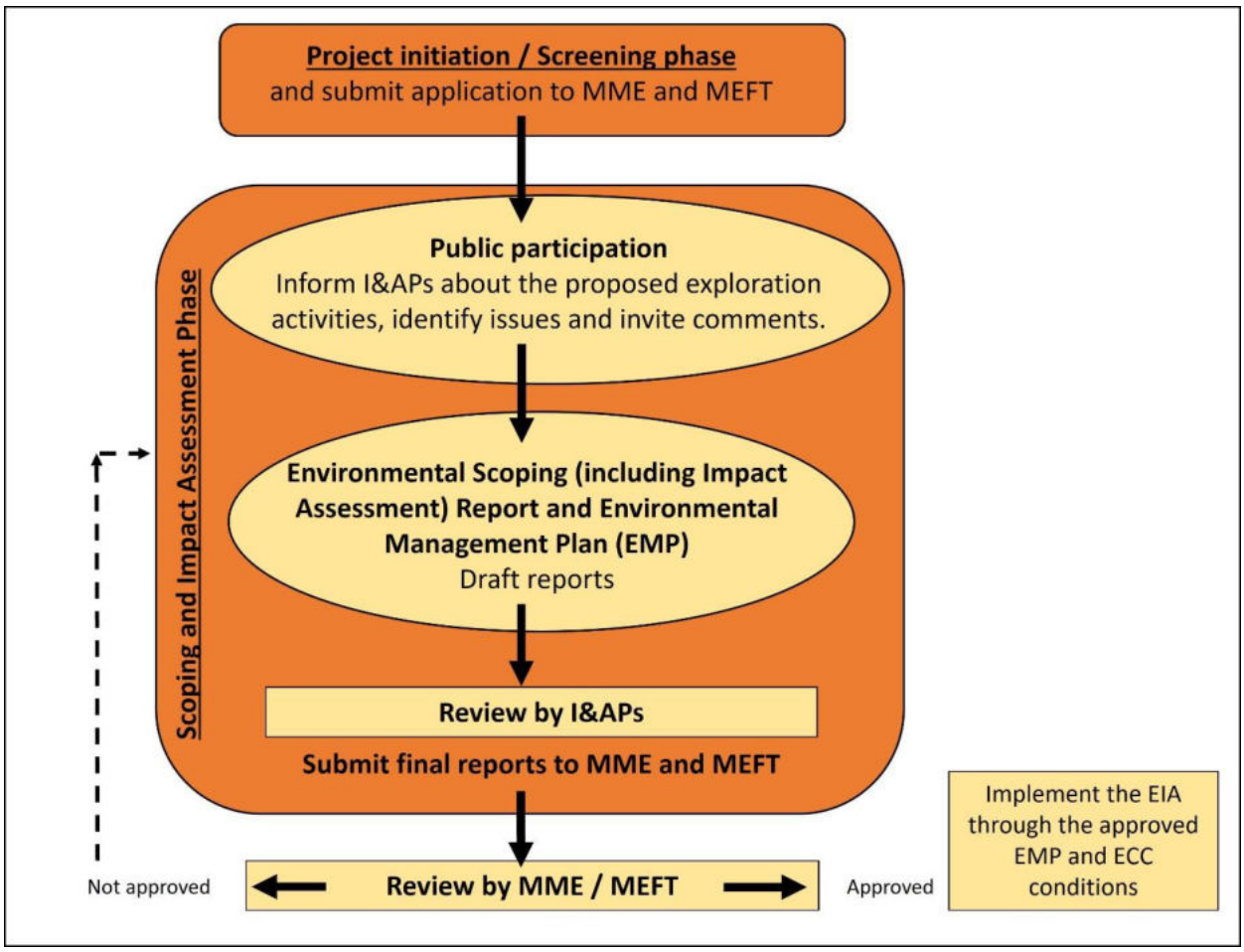

FIGURE B: THE EIA PROCESS

The subsequent process to obtain environmental clearance for each of the two EPLs includes a screening phase and a scoping phase, an impact assessment and an Environmental Management Plan (EMP) for both EPLs (see Figure B).

Accordingly, two separate Environmental Scoping (including impact assessment) Reports, one for each EPL, was composed. Information for these reports was obtained from site observations and from stakeholder consultations. The main purpose of these reports is to provide information relating to the proposed exploration activities, to indicate which environmental aspects and potential impacts have been identified during the internal screening and scoping phases and to summarize the Environmental Impact Assessment (EIA) process that has been followed. Two separate EMPs, one for each EPL, were composed as well. These EMPs contain the necessary management and mitigation measures for the likely impacts of the proposed exploration activities.

The above-mentioned EIA process is explained diagrammatically in Figure B.

Opportunity to comment

Interested and Affected Parties (I&APs) were invited to comment on this Report and the EMP, which were available for a review and comment period from 27 August to 17 September 2024. Comments on the reports must have been sent to Namisun at the telephone number, or e-mail address shown below before 17 September 2024.

Namisun
Attention: Dr Pierré Smit or Werner Petrick
E-mail address: oudoring@gmail.com or wpetrick.namisun.com
Cell number: +264 (0)81 752 7207 or (0)81 739 4591

3. Description of the proposed exploration activities

Phase 1 of the proposed exploration activities entail ground radiometric surveys to detect any mineralization in the area. This includes the review of geological maps of the area and onsite observations, followed by airborne radiometric, electromagnetic surveys and some grab sampling (small samples of rock and soil) for geochemical analysis.

Depending on the Phase 1 results, target areas will be delineated. If deemed worthy of follow up, ground-based surveys in the form of Reverse Circulation (RC) drilling will follow where mineralization is suspected. Diamond drilling is unlikely as the targets are mainly situated in calcrete.

3.1 Exploration machinery, vehicles and support

During Phase 1 one pick-up truck will be used. Exploration will be done on foot and without making any new access roads / tracks. Nobody will stay overnight onsite, and the vehicle will also not be left onsite overnight.

During Phase 2 two pick-up trucks, one drill rig, one support truck for rods and one fuel truck will be used. Of these the drill rig will stay overnight onsite, for which permission will be requested from the Directorate of Wildlife and National Parks (DWNP), but the other vehicles will not be allowed to stay overnight.

3.2 Water and electricity supply

Drinking water will be transported from Swakopmund to the field daily. If the project demands a bigger water need during Phase 2, a water tanker will transport water to site. The necessary authorizations will be arranged in such a case.

The equipment required for drilling have their own power supply and or fixed generators. No electricity is needed for any other purpose.

3.3 Fuel supply and storage

Diesel is the main consumable but will not be stored onsite. A fuel truck will bring diesel to site for refuelling of the stationery equipment. All vehicles will make use of the fuel station(s) in Swakopmund to refuel.

3.4 Access

Only existing access routes will be used during Phase 1 and all exploration activities onsite will be done on foot.

The main access to both EPLs will be via the C28 and D1982 roads (see Figure 1). During Phase 2, access roads will be required which will be rehabilitated after completion of the exploration activities, together with all other disturbed sites.

3.5 Employment and accommodation

It is anticipated that only one to two people will conduct work during Phase 1, supervised by a geologist.

During Phase 2 a drilling team of up to 10 operators may be required (if drilling is justified by the results obtained during Phase 1). The drilling team will be supervised by a geologist.

No person will be allowed to stay onsite after hours. Personnel will stay in Swakopmund (or elsewhere) and transported to and back from site daily.

3.6 Waste

The following types of waste will be generated during the exploration activities, in relatively small volumes:

- Domestic waste (non-hazardous).
- Industrial waste (i.e., hydrocarbon contaminated material / soil) (hazardous). All refuse generated will be contained and removed from the site daily.

Domestic waste will be contained in a manner that there can be no discharge of contamination to the environment and will be removed from site daily, for disposal at the designated landfill site in Swakopmund. Recyclable items will be sorted and stored in temporary containers and removed to relevant recycling centres (where possible).

Drip trays will be placed under all stationery equipment and during refuelling. Any oil spill will be scooped into bags and taken to a permitted disposal site.

Once a drilling site is established, a portable toilet and ablution facilities will be placed onsite to ensure that sewage is contained and disposed of (off-site) appropriately.

3.7 Fire Management

Working areas, including drill pads will be cleared of plant material – in case it is present – and anything that might increase the risk of starting an unintentional fire. To avoid starting a fire, smoking will only be allowed in dedicated smoking areas with a sand filled drum or similar container for disposal of cigarette butts. No food preparation will be allowed onsite. Furthermore, fire extinguishers will always be available onsite.

3.8 Rehabilitation

Post-drilling activities entail the rehabilitation of disturbed areas. Once the proposed exploration has been concluded on a specific work area, the impacted site will be rehabilitated to ensure a program of progressive rehabilitation and that no legacy is left behind.

4. Identification of potential environmental aspects and impacts assessment

The proposed exploration activities on EPL 9924 have the potential to impact on the environment. The environmental aspects and potential impacts were identified during the scoping process, in consultation with I&APs and the environmental team. Given the nature of the proposed exploration activities, and taking the existing environment into consideration, the potential impacts were qualitatively and cumulatively assessed.

In the camelthorn trees along the dry washes on the flat parts of the northern NNNP many nests of lappet-faced vultures (*Torgos tracheliotos*) occur, with a denser concentration visible around the Hotsas Waterhole. In the Park Management Plan for the NNNP, the Hotsas Waterhole is identified as a place of special value, surrounded by a concentric circle (buffer) in which minimal disturbance is recommended. These sensitivities were thoroughly considered during this assessment.

Table A provides a summary of the exploration activities, associated environmental aspects and potential impacts on the environment and a qualitative assessment of these impacts (before and after mitigation). The various management and mitigation measures relating to all the proposed exploration activities are included in the EMP for EPL 9924.

TABLE A: ENVIRONMENTAL ASPECTS AND POTENTIAL IMPACTS ASSOCIATED WITH THE EXPLORATION ACTIVITIES IN EPL 9924

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	With and without mitigation	Significance
Field mapping, ground radiometric survey and rock and soil sampling NOTE: Only one to two persons will conduct these activities which will be supervised / conducted by a geologist	Biodiversity	Potential impact on fauna and flora (general disturbance and clearing of vegetation) Broader ecological / systems impacts	Without	**L**
			With	**L**
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	Without	**M-H**
			With	**L**
	Heritage	Activities could result in possible damage to or destruction of heritage resources.	Without	**M**
			With	**L**
Airborne radiometric and electromagnetic surveys	Biodiversity	Potential impact on fauna (general disturbance) Broader ecological / systems impacts	Without	**L**
			With	**L**
		Potential impact on avifauna (i.e. lappet- Faced vultures) (general disturbance)	Without	**H**
			With	**L**
Drill site establishment: Access the drill site (possibly creating a new access track) Set-up drilling machine with drip trays and groundsheets Establish temporary safety fencing around the drill site Set-up portable toilet and ablution facilities	Noise (nuisance to third parties)	Noise generated by the establishment of access tracks and drill site and the potential impacts on tourism. (Noise-related aspects are considered under the biodiversity section)	Without	**L**
			With	**L**
	Biodiversity	Potential impacts on fauna and flora (general disturbance and clearing of vegetation including noise).	Without	**L-M**
			With	**L**
		Unsupervised drilling personnel can impact on the biodiversity through illegal collection of plant material or firewood, poaching	Without	**H**
			With	**L-M**

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	With and without mitigation	Significance
Set-up fuel and lubricants storage area		(either direct or indirect by informing syndicates), road kills, off-road driving, etc.		
		Site clearance may allow for the establishment of weeds and invasive plants in the area.	Without	**L**
			With	**L**
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	Without	**H**
			With	**L-M**
	Heritage	Exploration activities could result in possible damage to or destruction of heritage resources.	Without	**M**
			With	**L**
Drilling	Spillages of hydrocarbons, lubricants, or possible spills from portable toilet and ablution facilities	Soil pollution	Without	**L**
			With	**L**
		Surface water contamination	Without	**L-M**
			With	**L**
		Groundwater could become polluted due to pollutants entering aquifers via surface water infiltration.	Without	**M**
			With	**L**
	Dust from access roads and tracks. Air pollution from exhaust fumes. Dust from drilling activities	Air quality deterioration. Increase in dust levels (nuisance and health impacts – to visitors, road users and tourists)	Without	**L-M**
			With	**L**
	Noise generation	Noise generated by the drill could disturb nearby residences (nuisance and health impacts – to visitors, road users and tourists)	Without	**L-M**
			With	**L**
		Potential impact on fauna (general disturbance)	Without	**L-M**
			With	**L**

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	With and without mitigation	Significance
	Operational disturbances (including noise, worker / vehicle / machinery movement)	Broader ecological / systems impacts		
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	Without	**H**
			With	**L-M**
	Drill chips with potential radioactivity	Potential impacts on surface water, groundwater, soil, fauna, avifauna and third parties (visitors, road users and tourists)	Without	**L**
			With	**L**
All exploration activities	Socio-economic and third-party safety (i.e. visitors, road users and tourists)	Inconvenience and safety impacts to visitors, road users and tourists.	Without	**M**
			With	**L**
	Waste Management	The dumping of general waste within the exploration area and drilling sites could prove hazardous to wildlife. This could also lead to general environmental degradation and visual impacts.	Without	**M**
			With	**L**
	Social – provision of portable toilet and ablution facilities	Health and safety issues.	Without	**L**
			With	**L**
		Potential impacts on surface water, groundwater, soil, fauna, avifauna and third parties (visitors, road users and tourists)		
Rehabilitate disturbed areas after completion of activities	Biodiversity	Return site to natural state. No overall impacts.	**N/A**	

5. Environmental impact statement and conclusions

It is Namisun's opinion that the environmental aspects and potential impacts relating to the proposed exploration activities of GIB Mining in EPL 9924 in the NNNP, Erongo Region, have been successfully identified and assessed as part of this EIA Scoping (including impact assessment) process.

Relevant management and mitigation measures have been provided to ensure significant environmental and social impacts are avoided / minimized and positive social impacts enhanced, where relevant. These measures are included in the accompanying EMP for EPL 9924.

EPL 9924 encompasses areas of ecological sensitivity, specifically around the Hotsas Waterhole and along some of the drainage lines that are present. In addition, the Park Management Plan for the NNNP (MEFT, 2021) identifies the Hotsas Waterhole as a place of special value, surrounded by a concentric circle (buffer) in which minimal disturbance is recommended. Seeing that the target areas for exploration by GIB Mining is planned in the western part of EPL 9924, GIB Mining must implement the commitments in the EMP to avoid / minimize impacts to the sensitive areas and inform the DWNP prior to their planned drilling and associated activities near the Hotsas Waterhole.

In consideration of the Park Management Plan of NNNP, careful consideration from GIB Mining as well as MEFT and MME is required in respect of any planned (future) mining activities near the Hotsas Waterhole. This means that even though MEFT might allow exploration activities in EPL 9924 (under the conditions set out in this EMP, etc.) it is Namisun's, opinion that an early and a more detailed Environmental Screening Study be initiated, if mining and related activities are proposed near Hotsas Waterhole.

It is recommended that, if the MEFT provides a positive decision on the application for the proposed exploration activities of GIB Mining in EPL 9924, they should include a condition to the clearance that GIB Mining must implement all commitments and adhere to the management and mitigation measures contained in the EMP, also taking the above comments into consideration regarding the need for an in-depth screening study for possible future mining activities in the relevant (sensitive) areas.

6. The way forward

The way forward is as follows:

- The (draft) Environmental Scoping (including impact assessment) Report and the accompanying EMP were distributed for review and comments by I&APs.
- After the public review process, the reports were finalized with due consideration of all comments received and submitted to the MME and MEFT, and electronic copies of all the relevant documents are uploaded onto the MEFT (DEA) online portal.
- MME and MEFT will review the final documents and provide a record of decision.

ENVIRONMENTAL SCOPING (INCLUDING IMPACT ASSESSMENT) REPORT FOR THE PROPOSED EXPLORATION ACTIVITIES OF GIB MINING

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ACRONYMS AND ABBREVIATIONS

The list of acronyms and abbreviations used in this report are summarized in the table below:

Acronyms / Abbreviations	Definition
BID	Background Information Document
CITES	Convention in International Trade with Endangered Species
C-TAN	Coastal branch of the Tourism Association of Namibia
CV	Curriculum vitae
DEA	Department Environmental Affairs
DWNP	Directorate of Wildlife and National Parks
EAP	Environmental Assessment Practitioner
EAPAN	Environmental Assessment Professionals Association of Namibia
ECC	Environmental Clearance Certificate
EIA	Environmental Impacts Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
EPL	Exclusive Prospecting License
GDP	Gross Domestic Product
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
I&APs	Interested and / or affected parties
IBA	Important Bird Area
IHME	Institute for Health Metrics and Evaluation
IUCN	International Union for Conservation of Nature
mamsl	Meters above mean sea level
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
ML	Mining License
MME	Ministry of Mines and Energy
MoHSS	Ministry of Health and Social Services
NHC	National Heritage Council
NNNP	Namib Naukluft National Park
NSA	Namibia Statistics Agency
(Pty) Ltd	Proprietary Limited
RC	Reverse Circulation
SADC	Southern African Developing Community
SAIEA	Southern African Institute for Environmental Assessment
SDG	Sustainable Development Goals
SEA	Strategic Environmental Assessment
SHEQ	Safety, Health, Environment and Quality
TB	Tuberculosis
WHO	World Health Organization

1 INTRODUCTION

This chapter describes the purpose of the report, briefly describes the background and location of the proposed exploration activities, summarizes the legislative requirements, explains the report structure, summarizes assumptions and limitations of the study, and explains how the input from key stakeholders is included.

1.1 PURPOSE OF THIS REPORT

This Environmental Scoping (including impact assessment) Report has been compiled as part of the Environmental Impact Assessment (EIA) process for the proposed exploration activities of GIB Mining Namibia (Pty) Ltd (GIB Mining) on the Exclusive Prospecting Licence (EPL) 9924 in the Erongo Region of Namibia.

Registered Interested and Affected Parties (I&APs) were provided with an opportunity to comment on this report (see Section 2.3). After the end of the comment period, the report was finalized with due consideration of the comments received and is submitted to the Directorate of Mines at the Ministry of Mines and Energy (MME), which is the competent authority, and the Department of Environmental Affairs (DEA) within the Ministry of Environment, Forestry and Tourism (MEFT) for decision-making.

1.2 BACKGROUND AND LOCATION

GIB Mining is the Namibian registered company of Gibb River Diamonds Limited of Australia. The company is busy developing the Ellendale diamond project and Edjudina gold project in Australia. In Namibia GIB Mining has acquired six EPLs covering 1,828 km^2, two of which are in the Erongo Region. On these two – EPL 9924 and EPL 10131 – GIB Mining intends to conduct exploration activities for nuclear fuel minerals. Both EPLs are located within the Namib Naukluft National Park (NNNP), east of Swakopmund and between the C28 and C14 main roads (see Figure 1).

EPL 9924, the subject of this report, is about 110 km from Swakopmund, just south of Hotsas. EPL 10131, which is the subject of a separate report by Namisun, is further east, southeast of Gemsbokwater and close to the eastern boundary of the park. Both the waterholes at Hotsas and Gemsbokwater are less than 1 km from the EPLs. Ganab (Campsite) is 8 km southwest from EPL 10131 and Tumas View is 13 km southwest of EPL 9924. Access from the C28 road via existing park roads is possible to both EPLs.

Both EPLs are relatively small - EPL 9924 is 1,535 ha and EPL 10131 is 3,227 ha in size, i.e. a total of 47.6 km^2.

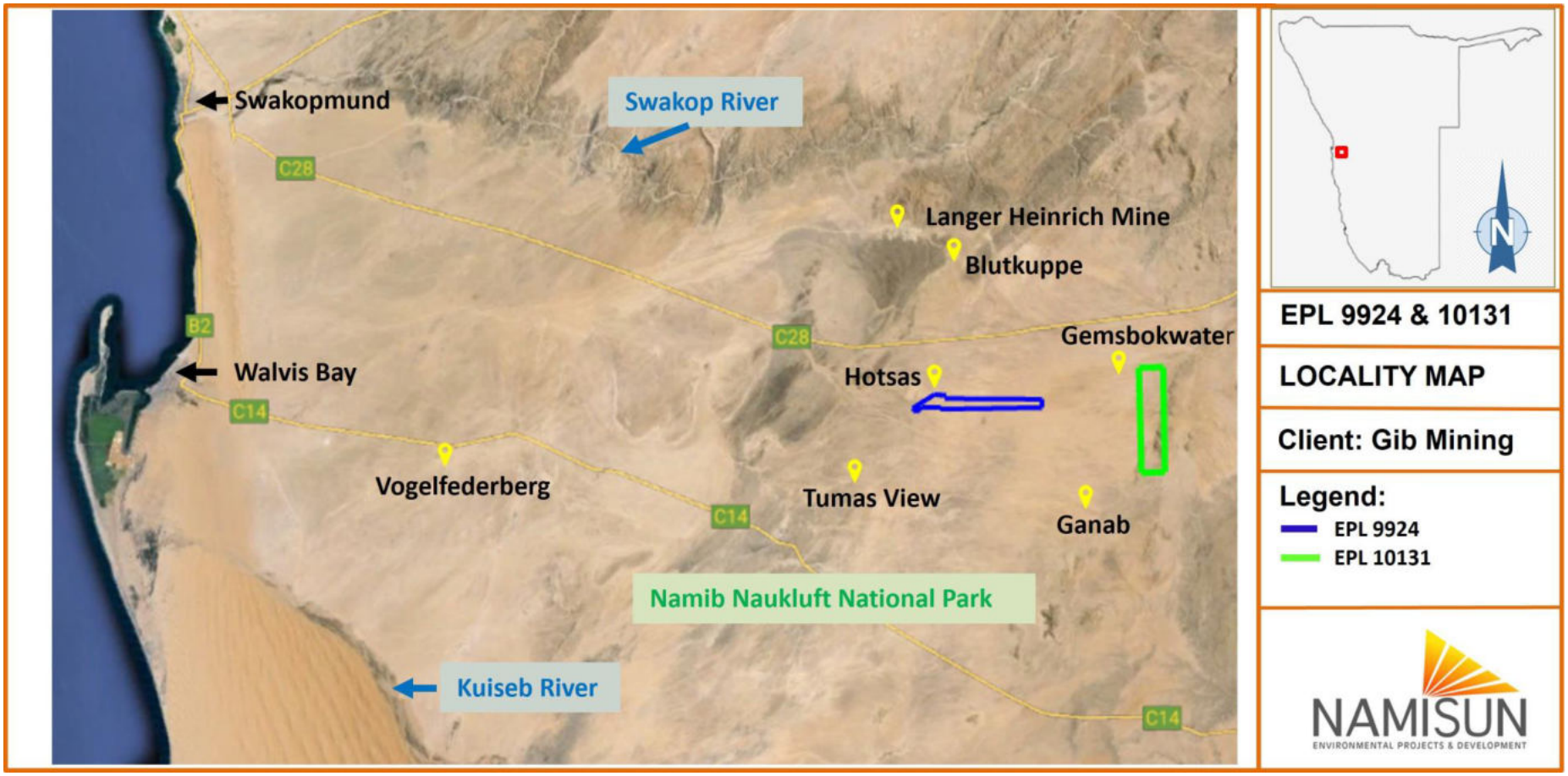

FIGURE 1: LOCATION OF EPL 9924 AND EPL 10131

1.3 MOTIVATION (NEED AND DESIRABILITY) FOR THE PROPOSED PROJECT

The Directorate of Mines of the MME is tasked with the management of the mineral resources in Namibia, to ensure activities are undertaken to exploit the country's mineral resources in a manner which integrates mining into the various economic sectors for the socio-economic development of the country. To achieve this, MME issues EPLs to various entities for the exploration of minerals within the country.

GIB Mining proposes to undertake exploration activities in EPL 9924 for nuclear fuel minerals to confirm the feasibility of a resource. Should a feasible resource be located, it could provide social and economic development within the region and the country, subject to a Mining Licence (ML) being issued by MME and a separate, comprehensive (full) EIA process.

1.4 INTRODUCTION TO THE EIA PROCESS

Prior to the commencement of the proposed exploration activities in EPL 9924, environmental clearance is required from the regulatory authority, the DEA of the MEFT in terms of the Environmental Management Act, 7 of 2007. This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and its associated regulations were promulgated in January 2012 (Government Gazette No. 4878).

Namisun Environmental Projects and Development (Namisun) was appointed by GIB Mining as an independent environmental consulting company to undertake the required EIA process, to compile a Scoping (including an impact assessment) Report and accompanying Environmental Management Plan (EMP) for each of the two EPLs as part of the application process for an Environmental Clearance Certificate (ECC) for each.

1.4.1 GENERAL DESCRIPTION OF THIS EIA PROCESS

The subsequent (parallel) process to obtain separate environmental clearances for each of the two EPLs includes a screening phase and a scoping phase, (including an impact assessment) phase and an EMP for both EPLs (see Figure 2). The assessment methodology is discussed in Chapter 2, which describes the phases of the assessment process in detail.

This report is the Environmental Scoping Report, with impact assessments included for EPL 9924. The main purpose of the report is to provide information relating to the proposed exploration activities in EPL 9924 and to indicate which environmental aspects and potential impacts have been identified during the internal screening and scoping phases. The report consists of information obtained from site observations, and the results of stakeholder consultations. The

potential impacts of the proposed exploration activities could therefore be (qualitatively) assessed, and the assessment is also included in this report. With reference to Section 1.2, a separate EIA Scoping (including impact assessment) Report has been prepared by Namisun for EPL 10131.

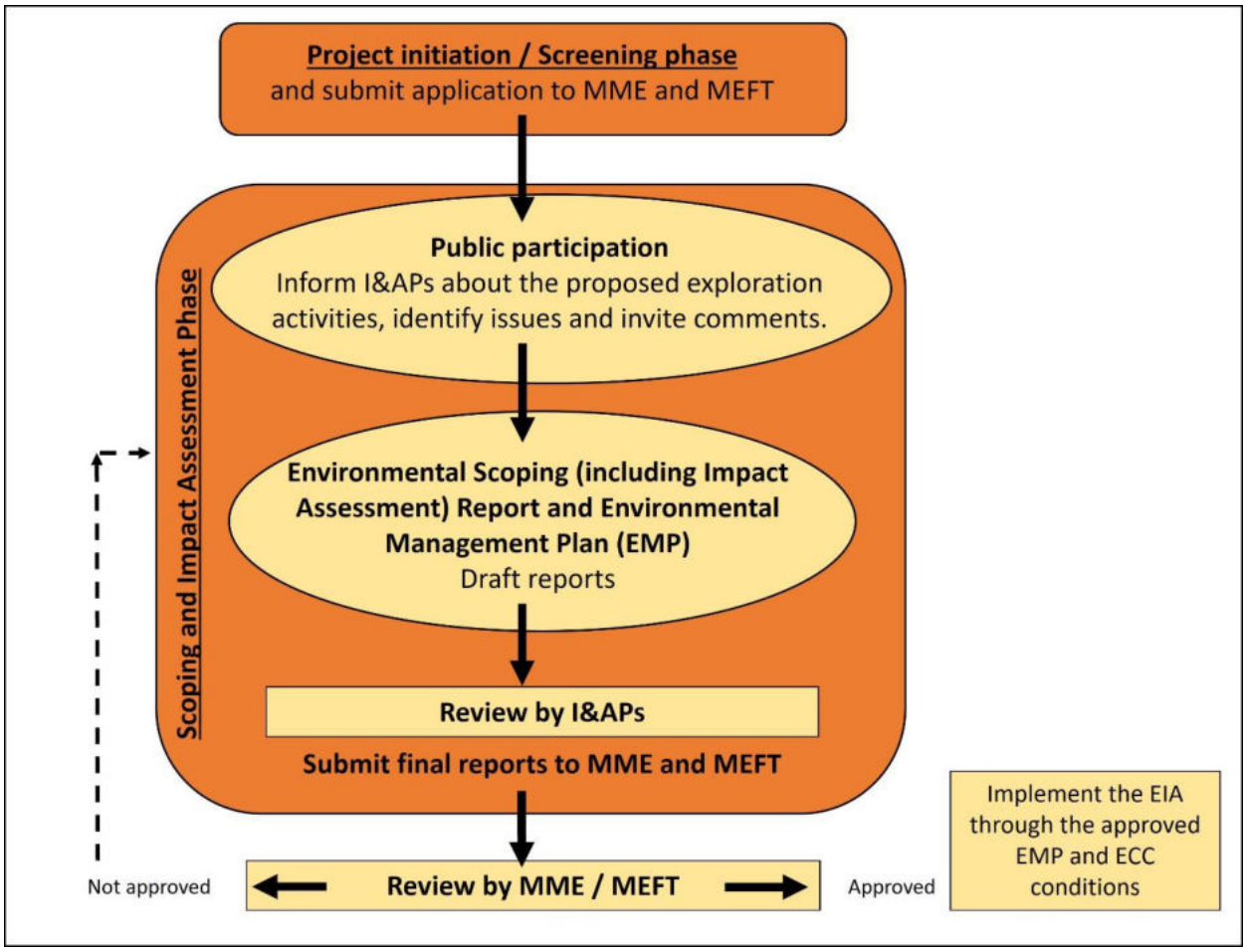

FIGURE 2: THE EIA PROCESS

The overall objectives of this assessment process are to:

- Provide information on the exploration activities proposed in EPL 9924.
- Describe the current environment in which the proposed exploration activities are planned.
- Identify, in consultation with I&APs the potential environmental aspects associated with the proposed exploration activities.
- Assess the potential impacts associated with the proposed exploration activities.
- Develop an EMP for both EPLs to avoid / minimise the potential impacts of the proposed exploration activities.

Applications for environmental clearances for the proposed exploration activities on both EPLs has been registered separately on the EIA online portal of the MEFT. At the same time electronic copies of the two applications for ECCs (Form 1) and a consolidated Background Information Document (BID) were submitted to the competent authority, the MME At completion, hard copies of the two applications for ECCs are submitted to the MME, who will review the applications and relevant final reports, and submit their comments and recommendations to the MEFT for review and decision-making. A final decision relating to the two applications will thus be made by the DEA of the MEFT after the submission of the final reports.

The (parallel) EIA process and corresponding activities which have been undertaken are outlined in Table 1, in accordance with the requirements outlined in the EIA Regulations of 2012.

TABLE 1: THE EIA PROCESS

Objectives	Corresponding activities
Project initiation and screening phase (June to July 2024)	
• Information requirements • Initiate the Environmental Scoping process.	• Project initiation meetings and site visit with GIB Mining to discuss the proposed project and EIA / ECC application process. • Early identification of environmental aspects and potential impacts associated with the proposed project activities and determine additional legal requirements. • Decision on EIA process to be followed. • Identify key stakeholders and compose an I&AP database.
Scoping (including an impact assessment) phase (July 2023 to September 2024)	
• Involve I&APs in the scoping process through information sharing. • Identify potential environmental issues. • Consider alternatives. • Provide details associated with the potentially affected environment. • Assessment of potential environmental impacts associated with the proposed project. • Develop management and mitigation measures. • ECC application.	• Notify authorities and I&APs of the proposed EIA process (phone calls, e-mails, newspaper advertisements and site notices). • I&AP registration and initial comments. • Key stakeholder (focus group) meetings and include I&AP issues and concerns in the study where relevant. • Compilation of Environmental Scoping (including impact assessment) Report and EMP. • Distribute the report and EMP to relevant authorities and I&APs for review. • Update and finalize the report with EMP, including comments received. • Online registration of the project onto MEFTs portal. • Submit application and finalized report with EMP, I&APs comments and accompanying supporting documents to the MME and MEFT (DEA) for decision-making.

• Submission of the final reports to the MME and MEFT (DEA). • Receive feedback on the application.	

It is thought that this Environmental Scoping (including impact assessment) Report and the accompanying EMP for the proposed exploration activities will provide sufficient information for MEFT to make an informed decision regarding the application, and whether an ECC can be issued or not.

Table 2 outlines the report content.

TABLE 2: SCOPING REPORT CONTENT

Chapter	Objective
Chapter 1: Introduction	Describes the purpose of the report, briefly describes the project, (i.e. proposed exploration activities) explains the report structure, summarises assumptions and limitations of the study and explains how the input of I&APs are included.
Chapter 2: EIA process methodology	Outlines the EIA process, including the I&AP consultation process.
Chapter 3: Legal framework	Provides an overview of relevant Namibian policies and applicable Namibian legislation
Chapter 4: Description of the proposed project	Describes the proposed facilities and activities associated with the exploration program.
Chapter 5: Description of the current environment	Provides a general overview of the current baseline conditions associated with the proposed project.
Chapter 6: Alternatives	Summarises the project alternatives.
Chapter 7: Identification of potential aspect and impact assessment	Outlines the environmental aspects and assesses the key potential impacts.
Chapter 8: EIA Statement and conclusions	EIA conclusion and impact statement
Chapter 9: Way forward	Describes the way forward to conclude the EIA process.
Chapter 10: References	Lists all references used.
Appendices	Contains all supporting information

The EMP, for both EPLs, are stand-alone documents based on the findings from the EIA process as presented in the separate Scoping (including an impact assessment) Reports for the respective EPLs. The EMPs are thus specific to each EPL (where relevant) and provide the necessary management and mitigation measures relating to the exploration activities proposed on the respective EPLs.

1.4.2 EIA TEAM

Namisun is an independent environmental consultancy firm appointed by GIB Mining to undertake the EIA process.

Dr Pierré Smit, the EIA Project Manager, holds a PhD in Landscape Ecology and has more than twenty-nine years of experience in environmental management, managing environmental assessment, the implementation of EMPs and Environmental Management Systems (EMSs) in Namibia.

Werner Petrick, the EIA Project Reviewer, has more than twenty-five years of relevant experience in conducting / managing EIAs, compiling EMPs and implementing EMPs and EMSs. Werner has a B. Eng (Civil) degree and a master's degree in environmental management and is certified as lead environmental assessment practitioner (EAP) and reviewer under the Environmental Assessment Professionals Association of Namibia (EAPAN).

The relevant curriculum vitae (CV) documentation is attached as Appendix A.

The environmental project team and proponent details for the EIA amendment process relating to the project is outlined in Table 3.

TABLE 3: EIA TEAM AND PROPONENT DETAILS

Team	Name	Designation	Tasks and roles	Company
Project proponent	Nico Scholtz	Exploration Geologist	Technical input Implementation of the EMP	GIB Mining
EIA Project Manager	Pierré Smit	EAP	Management of the EIA process, public participation and reporting	Namisun
EIA Project Reviewer	Werner Petrick	EAP	Review of the EIA process and reports	
Specialist	John Kinahan	Archaeologist	Archaeological (specialist) study	J Kinahan

Acknowledgements:

- Mr Peter Bridgeford provided key information and input relating to the lappet-faced vultures, and specific to their presence in the northern NNNP.
- Mr Cornelis van der Waal provided general input regarding the landscape ecology of the northern NNNP.

Thank you both for sharing this useful information which allowed a more comprehensive understanding of the biodiversity and sensitivities of the northern NNNP. A hearty 'thank you' to both.

1.5 Assumptions and Limitations

Some general assumptions are described below.

1.5.1 Study Area

The area under investigation is defined as EPL 9924. Except for the parallel process followed in EPL 10131, also for GIB Mining, Namisun did not assess any of the adjacent (or overlapping) EPLs, neither did Namisun investigate the areas outside EPL 9924.

1.5.2 Existing Baseline Information

It is assumed that the technical information provided by GIB Mining, and the baseline information obtained from the references listed in Section 2.1, is accurate.

1.5.3 Environmental Assessment Limit

The following activities and associated potential impacts are excluded from this application / assessment (i.e. this report):

- The assessment focuses only on the proposed exploration activities in EPL 9924. Also, future mining activities are not yet being planned and is not part of the scope of this assessment. However, due to the sensitivities identified in part of EPL 9924, Namisun provides a high-level opinion relating to possible mining activities in this area as well as the need for a more detailed screening study. See also Chapter 8 of this report.
- Potential impacts associated with other proposed facilities and activities outside EPL 9924 are not considered in this report.
- The EIA focused on third parties only and did not assess health and safety impacts on workers because it is assumed that these aspects are separately regulated by health and safety legislation, policies and standards, and that GIB Mining will adhere to these.

1.6 Opportunity to Comment

I&APs were invited to comment on this Report and EMP, which were available for a review and comment period from 27 August to 17 September 2024. Comments on the reports must have been sent to Namisun at the telephone number, or e-mail address shown below before **17 September 2024**.

Namisun

Attention: Dr Pierré Smit or Werner Petrick

E-mail address: oudoring@gmail.com or wpetrick.namisun.com

Cell number: +264 (0)81 752 7207 or (0)81 739 4591

2 EIA PROCESS (SCOPING AND ASSESSMENT) METHODOLOGY

This chapter outlines the Environmental Scoping and Impact Assessment methodology, and I&AP consultation process followed by Namisun.

2.1 INFORMATION COLLECTION

Namisun obtained information from GIB Mining to identify the environmental aspects and potential impacts associated with the exploration activities proposed on EPL 9924. Additional information for the preparation of this report was sourced from:

- Atlas of Namibia (Mendelsohn et al., 2002).
- Atlas of Namibia: its land water and life (Atlas of Namibia Team, 2022)
- Site visits by Namisun (June and July 2024).
- Consultations and focus group meetings with I&APs, including consultations with relevant environmental specialists (June and July 2024).
- Consultations with MEFT officials – Park Ranger and Park Warden
- Specialist report – archaeology (Kinahan, 2024)
- Relevant documents by Namisun –
    - Environmental Scoping (including impact assessment) Report for the proposed Liquid Mud Plant for Services Pétroliers Schlumberger (SLB) in the Port of Walvis Bay (Namisun, 2023a)
    - Environmental Impact Assessment Report for the proposed Tumas Project and associated infrastructure in the Erongo Region of Namibia (Namisun, 2023b)
- Information retrieved from the internet:
    - www.nsa.org.na
    - www.mhss.gov.na
- Socio-economic information retrieved from several reports (IHME, 2016; WHO, 2016; NSA, 2017 and 2019)
- Google Earth.

2.2 SCOPING REPORT STRUCTURE

The structure of this Environmental Scoping (including impact assessment) Report is outlined in Table 4, based on the Scoping Report requirements as set out in Section 8 of the EIA Regulations (2012), promulgated under the Environmental Management Act, No. 7 of 2007.

TABLE 4: REPORT STRUCTURE, AS STIPULATED IN THE EIA REGULATIONS

Component	Report reference
(a) Details of the Environmental Assessment Practitioner (EAP) who prepared the report.	Section 1.4.2 and Appendix A
(b) A description of the proposed activity.	Chapter 4
(c) A description of the environment that may be affected by the activity and the way the physical, biological, social, economic, and cultural aspects of the environment may be affected by the proposed project.	Chapters 5 and 7
(d) A description of the need and desirability of the proposed listed activity and identified potential alternatives to the proposed listed activity, including advantages and disadvantages that the proposed activity or alternatives may have on the environment and community that may be affected by the activity.	Section 1.3, Chapter 4, 6 and 7
(e) An identification of laws and guidelines that have been considered in the preparation of the Scoping Report.	Chapter 3
(f) Details of the public consultation process conducted in terms of Regulation 7(1) in connection with the application, including:	Section 2.3
(i) steps that were taken to notify potentially interested and affected parties of the proposed application;	Section 2.3.1/2 and Appendix B
(ii) proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the proposed application have been displayed, placed or given;	
(iii) a list of all persons, organisations and organs of state that were registered in terms of Regulation 22 as interested and affected parties in relation to the application; and	Section 2.3.1 and Appendix D
(iv) a summary of the issues raised by interested and affected parties, the date of receipt of and the response of the EAP to those issues;	Section 2.3.3 and Appendix C
(g) an indication of the methodology used in determining the significance of potential effects / a description and assessment of the significance of effects, including cumulative effects, that may occur because of the undertaking of the activity or identified alternatives or because of any construction, erection or decommissioning associated with the undertaking of the proposed listed activity;	Chapters 7
(h) a description and comparative assessment of all alternatives identified during the assessment process;	Chapter 6
(i) a description of all environmental issues that were identified during the assessment process, an assessment of the significance of each issue and an indication of the extent to which the issue could be addressed by the adoption of mitigation measures;	Chapter 7
(j) an assessment of each identified potentially significant effect;	
(k) a description of any assumptions, uncertainties and gaps in knowledge;	Section 1.5
(l) a management plan;	Separate document

Component	Report reference
(m) an opinion as to whether the proposed listed activity must or may not be authorised, and if the opinion is that it must be authorised, any conditions that must be made in respect of that authorisation	Chapter 10
(n) a non-technical summary of the information	Executive Summary

2.3 PUBLIC PARTICIPATION PROCESS

The public participation process for the proposed project was conducted to ensure that all persons and or organisations that may be affected by or are interested in the proposed exploration activities in EPL 9924, were informed, and could register their views and concerns. By consulting with relevant authorities and I&APs, the range of environmental issues to be considered in this report has been given specific context and focus.

Section 2.3.1 provides a summary of I&APs consulted, Section 2.3.2 describes the process that was followed, and the issues that were identified are summarized in Section 2.3.3.

2.3.1 INTERESTED AND AFFECTED PARTIES

The broad list of persons, group of persons or organisations that were informed about the project and were requested to register as I&APs, should they be interested and or affected, include:

- The Directorate of Mines at the MME (Office of the Environmental Commissioner).
- The DEA at the MEFT (Office of the Environmental Commissioner).
- The Directorate of Wildlife and National Parks (DWNP) at the MEFT.
- The National Heritage Council (NHC).
- The Directorate Water Resource Management at the Ministry of Agriculture, Water and Land Reform (MAWLR).
- The Namibian Uranium Association and its members.
- Elspe Mining.
- The Chamber of Mines.
- The Chamber of Environment.
- The Gobabeb Research and Training Centre.
- Vultures Namibia.
- Other I&APs.

Key stakeholders were engaged and consulted throughout the assessment.

2.3.2 STEPS IN THE CONSULTATION PROCESS

The above-mentioned stakeholders were informed about the need for the proposed project, the EIA process (including the public consultation), as well as the outcomes of the assessment. Consultation with I&APs was ensured through an advertisement in newspapers, site notices, email notifications and the distribution of relevant EIA documents, i.e. a BID and this Environmental Scoping (including impact assessment) Report and EMP.

The full stakeholder database for this project is included in Appendix D of this report.

Focus group meetings with key stakeholders took place between 19 June and 18 July 2024 in Swakopmund. The meetings were held with the following objectives:

- Provide the location and description of the proposed exploration activities.
- Provide a description of the (parallel) EIA process followed in both EPLs.
- Provide I&APs with an initial opportunity to be involved in the EIA process.
- Identify any potential environmental issues and impacts.
- Describe the way forward highlighting further opportunities to be involved in the EIA process.

Minutes of the meetings are contained in Appendix C.

Table 5 sets out the steps that were followed as part of the consultation process.

TABLE 5: CONSULTATION PROCESS WITH I&APS

TASK	DESCRIPTION	DATE
Notification - regulatory authorities and I&APs		
Notification to MME and MEFT	Namisun notified the DEA of the MEFT of the proposed project through registering the project on the MEFT online portal and uploading the BID. At the same time an electronic copy of the ECC application form and BID were sent to the competent authority (MME).	June 2024
I&AP identification	The stakeholder database was developed as part of the screening phase and is updated as and when required. A copy of the I&AP database is attached in Appendix D.	June 2024 – ongoing
Distribution of the BID	Copies of the BID were distributed via email to relevant authorities and I&APs on the stakeholder database and hard copies were made available on request. The purpose of the BID was to inform I&APs and authorities about the proposed project, the assessment process being followed, possible environmental impacts and ways in which I&APs could provide input / comments to Namisun. Copies of the notifications and BID are attached in Appendix B.	June 2024

TASK	DESCRIPTION	DATE
Site notices	Site notices were placed at the offices of the Namibian Uranium Association and at the Hotsas Waterhole in the NNNP – to notify I&APs of the proposed project, and the EIA process being following. Photos of the site notices that were displayed are attached in Appendix B.	June 2024
Newspaper Advertisements	Block advertisements were placed in the Market Watch (on 19 and 26 June 2024) as part of the following newspapers: • The Namibian Sun • Die Republikein • Allgemeine Zeitung Copies of the advertisements are attached in Appendix B.	June 2024
Key stakeholder and focus group meetings		
Focus group meetings	Focus group meetings were held, with: • The Namibia Uranium Association and its members • Elspe Mining • The coastal branch of the Tourism Association of Namibia (C-TAN). • Personnel of the Directorate of Wildlife and National Parks. • Vultures Namibia. It was also communicated to I&APs that focus group meetings would be arranged with key stakeholders, and that if anyone would like to attend a focus group meeting could contact Namisun. The minutes of these meetings are summarised and attached under Appendix C.	June and July 2024.
Submission of comments by I&APs		
Comments and responses	A summary of all questions / comments / issues raised (with responses) by I&APs throughout the process and during the meetings are documented and were incorporated in this report (see Section 2.3.3) and are attached under Appendix C.	July 2024.
Review of the draft Scoping (including an impact assessment) Report and EMP		
I&APs and authorities review of the draft Scoping (including an impact assessment) Report and EMP	A hard copy of the Scoping (including an impact assessment) Report and the accompanying EMP and supporting documents were available for public review. An electronic copy of the Executive Summary of the report (i.e. main report) was distributed to all relevant authorities and I&APs on the stakeholder database via e-mail, informing them that a hard copy of the full report and accompanying EMP were available for public review. Electronic copies of these documents were also available on request from Namisun. Authorities and I&APs were given the opportunity to review the draft report and submit comments in writing to Namisun. The comments period commenced on **27 August** and the closing date for comments was **17 September 2024.**	August and September 2024

TASK	DESCRIPTION	DATE
MME and MEFT review the final Scoping (including an impact assessment) Report and EMP and decide on the application	Namisun incorporated the comments into a final report. A copy of the final report, including comments from authorities and I&APs, accompanied by the EMP and the Application Form are submitted to the MME for review and recommendation to MEFT who will do the final review for decision-making. The final report (including I&APs comments), EMP and application are also uploaded onto the MEFT portal.	September 2024

2.3.3 SUMMARY OF THE ISSUES RAISED

During the initial I&AP registration and BID-comment period and during the focus group meetings:

The following are the main topics covered in the comments received from I&APs:

- Does the scope of the Environmental Scoping (including impact assessment) Report include the potential future mining activities?
- Management requirements and mechanisms reflected in the "National Policy on Prospecting and Mining in Protected Areas" must guide the EMP for the project and be formalized as commitments where relevant.
- As Hotsas is known for the occurrence of vultures, the engagement of the people closely involved with Vultures Namibia, is recommended to guide the assessment in terms of sensitivities, restriction of activities, stay-away areas and periods, etc.
- What rehabilitation interventions are planned after the exploration activities are completed?

The issues described above, together with their responses are described in greater detail in the Issues and Response Report contained in Appendix C.

3 LEGAL FRAMEWORK

This chapter provides an overview of relevant Namibian policies and applicable Namibian legislation and international conventions / treaties applicable to the proposed project.

The Republic of Namibia has five tiers of law and a few guiding policies relevant to environmental assessment and protection, which include the Constitution of the Republic of Namibia, statutory law, common law, customary law and international law.

As the main source of legislation, the Constitution of the Republic of Namibia (1990) makes provision for the creation and enforcement of applicable legislation. Article 95 (1) of the Constitution says: *"The State is obliged to ensure maintenance of ecosystems, essential ecological processes and biological diversity and utilisation of living natural resources on a sustainable basis for the benefit of Namibians both present and future"*.

In this context and in accordance with the constitution, Namibia has passed numerous laws intended to protect the natural environment and mitigate against adverse environmental impacts.

In Namibia all mineral rights are vested in the State and are regulated by the Minerals (Prospecting and Mining) Act, 1992 (No. 33 of 1992). This Act provides for the reconnaissance, prospecting and mining for minerals in Namibia, as well as the disposal thereof. The Minerals Policy of Namibia (2004) sets out guiding principles for the development of the mining sector while at the same time operating within environmentally acceptable limits. The management and regulation of exploration activities falls within the jurisdiction of the MME (Directorate of Mines).

Environmental regulations are guided and implemented by the DEA within the MEFT. The EIA Policy (1995) is enforced through the Environmental Management Act, No. 7 of 2007 and the EIA Regulations of 6 January 2012 (EIA Regulations). In terms of this legal framework certain identified activities may not commence without an environmental clearance issued by MEFT (see also Section 1.4).

3.1 RELEVANT ACTS

The acts of relevance to this project are summarized in Table 6.

TABLE 6: RELEVANT LEGISLATION FOR THE PROPOSED PROJECT

YEAR	NAME	Natural Resource Use (energy & water)	Emissions to air (fumes & dust)	Emissions to land (non-hazardous & hazardous)	Emissions to water	Noise	Visual	Traffic	Impact on Land use	Impact on biodiversity	Impact on Archaeology	Socio-economic	3rd Party Safety & Health	Other
1956	Water Act, No. 54 of 1956, as amended	X			X							X		
1969	Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971	X		X	X				X	X				
1974	Hazardous Substance Ordinance, No. 14 of 1974													X
1975	Nature Conservation Ordinance, No. 14 of 1975	X			X					X	X			
1976	Atmospheric Pollution Prevention Ordinance, No. 11 of 1976		X											
1990	The Constitution of the Republic of Namibia of 1990	X	X	X	X	X	X	X	X	X	X	X	X	
1990	Petroleum Products and Energy Act, No. 13 of 1990		X	X	X					X			X	X
1992	Minerals (Prospecting and Mining) Act, No. 33 of 1992	X	X	X	X					X				
1996	Nature Conservation Amendment Act, No 5 of 1996	X			X					X	X			
2001	The Forestry Act, No. 12 of 2001 as amended by the Forest Amendment Act, No.13 of 2005	X							X	X				
2003	Pollution Control and Waste Management Bill (3rd Draft September 2003)		X	X	X	X								

YEAR	NAME	Natural Resource Use (energy & water)	Emissions to air (fumes & dust)	Emissions to land (non-hazardous & hazardous)	Emissions to water	Noise	Visual	Traffic	Impact on Land use	Impact on biodiversity	Impact on Archaeology	Socio-economic	3rd Party Safety & Health	Other
2004	National Heritage Act of Namibia, No. 27 of 2004										X			
2005	Atomic Energy and Radiation Protection Act, Act No. 5 of 2005 and Radiation Protection and Waste Disposal Regulations (Regulations, 2011) under this Act.		X	X	X				X			X	X	X
2007	Labour Act, 2007, No. 11 of 2007			X								X	X	
2007	Environmental Management Act, No. 7 of 2007	X	X	X	X	X	X	X	X	X	X	X	X	
2009	Draft Protected Areas and Wildlife Management Bill	X							X	X	X	X		X
2012	Regulations promulgated in terms of the Environmental Management Act, No. 7 of 2007	X	X	X	X	X	X	X	X	X	X	X	X	X
2013	Water Resources Management Act, No. 11 of 2013	X			X							X		
2015	Public and Environmental Health Act, No. 1 of 2015					X							X	
2017	Nature Conservation Amendment Act, No.3 of 2017	X			X					X	X			
2023	Regulations promulgated in terms of the Water Resources Management Act, No. 11 of 2013	X			X							X		

3.2 RELEVANT POLICIES

In addition to the formal legal frameworks listed in Table 6, some policies and plans are relevant to this assessment too:

- EIA Policy (1995)
- National Environmental Health Policy (2000).
- Draft Wetland Policy (2003).
- Minerals Policy of Namibia (2004).
- The National Climate Change Policy of Namibia (September 2010).
- National Development Plan, 2017/2018 – 2021/2022, guided by Vision 2030.
- National Policy on Prospecting and Mining in Protected Areas (2019)
- Namibia Vision 2030.

3.3 APPLICABLE LISTED ACTIVITIES

The EIA Policy (1995) is enforced through the Environmental Management Act, 7 of 2007 and the EIA Regulations of 6 January 2012 (EIA Regulations). In terms of this legal framework certain identified activities may not commence without an environmental clearance issued by MEFT.

The following activities identified in the regulations apply to the proposed exploration activities:

"**MINING AND QUARRYING ACTIVITIES"**

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

"WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES"

- The construction of facilities for waste sites, treatment of waste and disposal of waste.
- Any activity entailing a scheduled process referred to in the Atmospheric Pollution Prevention Ordinance, 1976.

"HAZARDOUS SUBSTANCE TREATMENT, HANDLING AND STORAGE"

- The manufacturing, storage, handling or processing of a hazardous substance defined in the Hazardous Substances Ordinance, 1974.
- Any process or activity which requires a permit, licence or other form of authorisation, or the modification of or changes to existing facilities for any process or activity which requires an amendment of an existing permit, licence or authorisation or which requires a new permit, licence or authorisation in terms of a law governing the generation or release of emissions, pollution, effluent or waste.

3.4 Other Guidance and Regulatory Frameworks

3.4.1 International Legislation, Treaties, Standards and Guidelines

Some international legislation, treaties, standards and guidelines – some to which Namibia is a signatory – are also of relevance, including the following:

- The Stockholm Declaration on the Human Environment, Stockholm 1972.
- Convention in International Trade with Endangered Species (CITES) (1973).
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (referred to as the Ramsar Convention) of 1975.
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) of 1979.
- Vienna Convention for the Protection of the Ozone Layer (1985).
- Montreal Protocol on Substances that Deplete the Ozone Layer (1987).
- Basel Convention on the Control of Transboundary Movements of Hazardous Waste and their Disposal (1989).
- Convention on Biological Diversity (1992).
- United Nations Framework Convention on Climate Change (1992).
- Kyoto Protocol on the Framework Convention on Climate Change, 1998.
- Southern African Developing Community (SADC) Protocol on Wildlife Conservation and Law Enforcement, 1999.
- The African Convention on the Conservation of Nature and Natural Resources (revised) 2003.
- Convention on Migratory Species (2011).
- United Nations Sustainable Development Goals (SDGs) 2015.

3.4.2 STRATEGIC ASSESSMENTS

World demands for uranium increased sharply during the second half of the first decade of the 21st century due to the growing needs of nuclear reactor requirements worldwide. These projected shortcomings resulted in uranium prices rising sharply in June 2007. This favourable outlook triggered renewed interest in uranium exploration in the central part of the Erongo Region, with 36 exploration licences for nuclear fuels being granted by the end of 2007.

In 2009 this sudden scramble for prospecting rights in the Central Namib Desert resulted in the central government to contract the Southern African Institute for Environmental Assessment (SAIEA) to undertake a SEA for the Central Namib Uranium Rush. This study provided a tool for authorities and other stakeholders how best to manage developments in association with this Uranium Rush. The SEA allows decision-makers to integrate the full spectrum of environmental considerations within the planning process. Furthermore, the SEA provides an overview and advice on how to avoid negative cumulative impacts, as well as how to enhance opportunities and benefits within the uranium sector and between mining and other industries.

3.4.3 LEGISLATION AND GUIDELINES RELATED TO EXPLORATION (AND MINING) IN PROTECTED AREAS

In June 2018 the MEFT and the MME released the “National Policy on Prospecting and Mining in Protected Areas”. This policy guides decision-making with regards to exploration and mining in protected areas. With a vision to “develop integrated and sustainable prospecting and mining in Namibia to support economic growth, whilst maintaining the integrity of ecosystems and natural resources, and avoiding degradation of areas highly sensitive for their ecological, social and or cultural heritage value”, the policy provides, amongst others “protected areas with specific zones to be excluded from prospecting and mining”. Both EPLs of GIB Mining fall within the NNNP and are located within such a zone identified as “Management Areas – National Park” (see Figure 3).

MEFT also developed a Park Management Plan for the NNNP, which provides guidelines in terms of revised management areas and management measures (MEFT, 2021). This plan provides, amongst others, an overview of the NNNP; guidelines on the park management objectives, zonation and landscape-level conservation and development. It also describes conservation and management of biodiversity principles, cultural and historical, archaeological and paleontological assessments and refers to adaptive management concepts and relevant infrastructure in the park. The assessment for the impacts of the proposed exploration activities of GIB Mining in EPL 9924 takes cognisance of the Park Management Plan, where relevant.

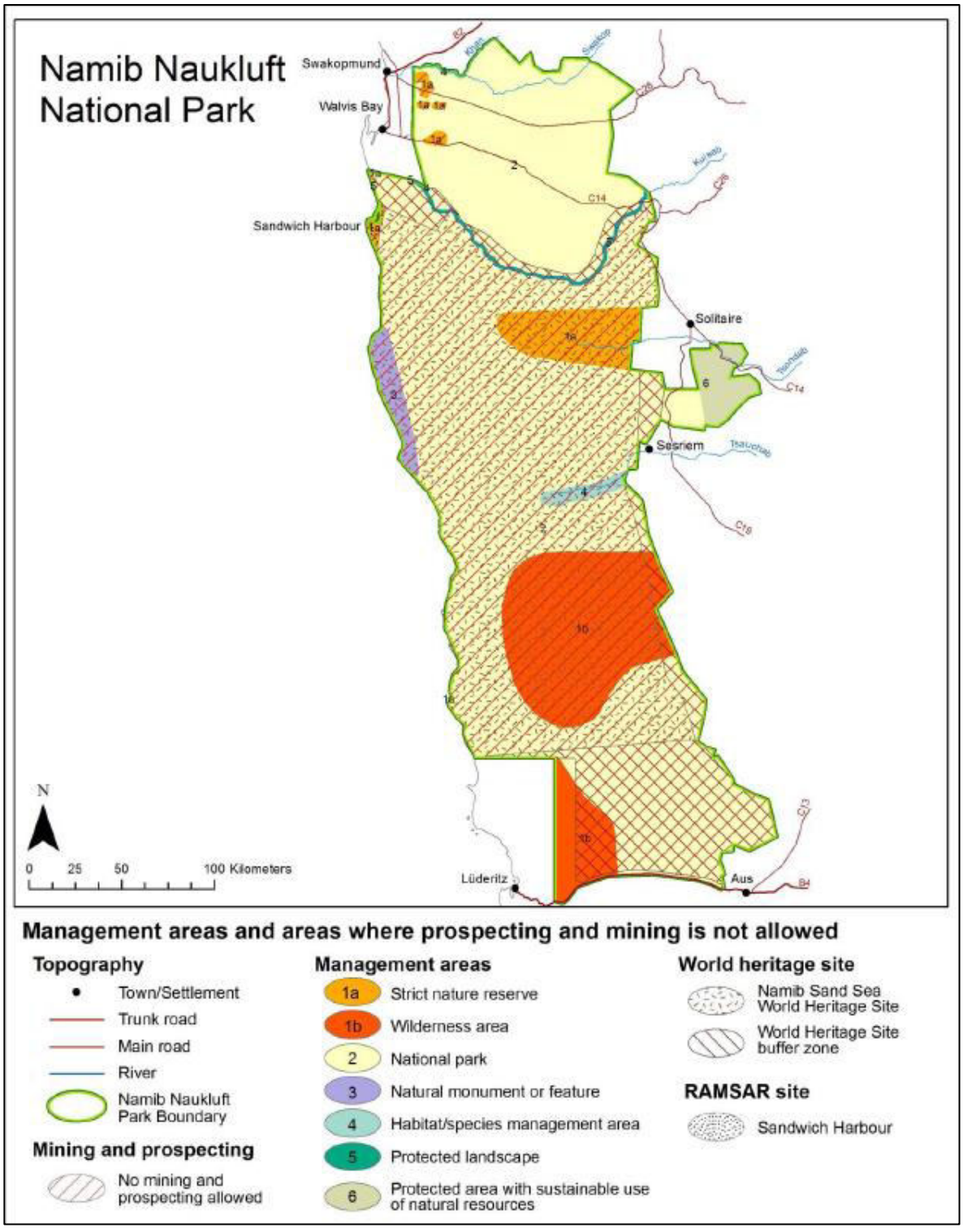

FIGURE 3: MANAGEMENT AREAS OF THE NNNP

(Source: National Policy on Prospecting and Mining in Protected Areas, 2019)

The Park Management Plan identifies the Hotsas Waterhole as a place of special value, surrounded by a concentric circle (buffer) in which minimal disturbance is recommended (MEFT, 2021 p97). The document furthermore states that engagement with the MME is necessary to prevent EPLs and MLs being granted in special value zones and minimum disturbance zones.

Moreover, this implies that MEFT must engage MME to update the National Policy on Prospecting and Mining in Protected Areas, which has not been done yet.

4 PROJECT DESCRIPTION

This chapter provides a description of the proposed exploration activities in EPL 9924.

4.1 INTRODUCTION

GIB Mining proposes to undertake exploration activities in EPL 9924 for nuclear fuel minerals. EPL 9924 is small, it covers only 1,535 ha, and exploration activities are proposed in a targeted area only (see Figure 4), which covers most of its western part.

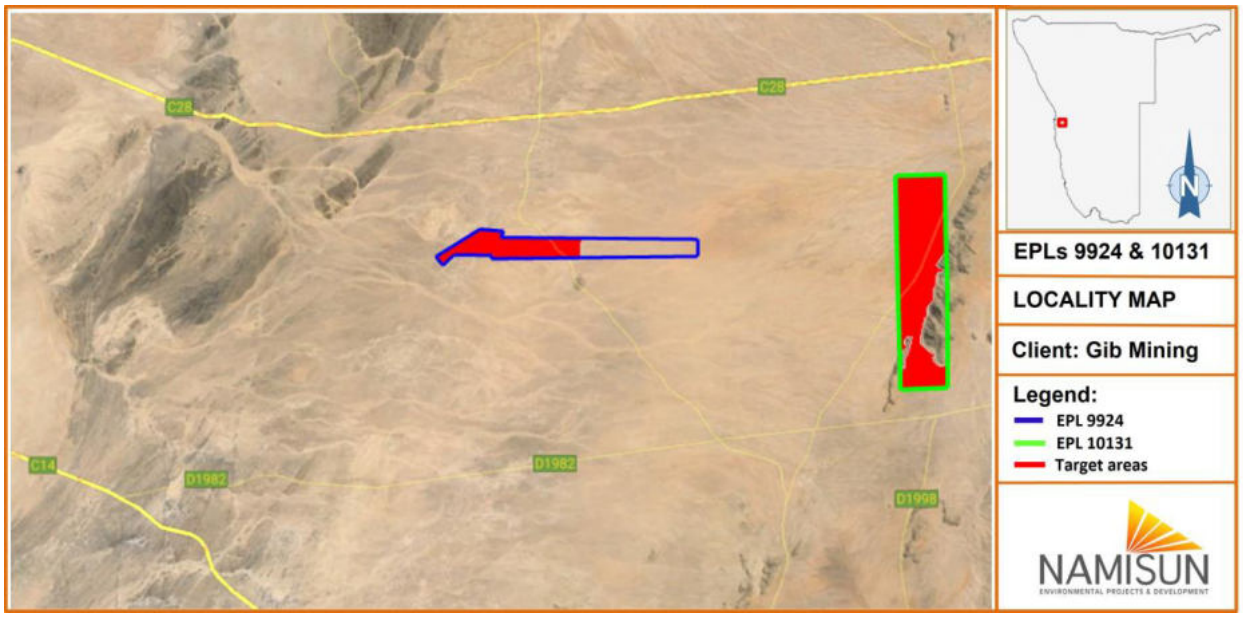

FIGURE 4: TARGET AREAS OF THE TWO EPLS

4.2 THE PROPOSED EXPLORATION ACTIVITIES

The exploration activities shall commence as soon possible, depending on the decision by MEFT and the issuing of an ECC. A sequential exploration program is planned with non-invasive activities to commence before invasive activities.

Phase 1 entail ground radiometric surveys to detect any mineralization in the area. This includes the review of geological maps of the area and onsite observations, followed by airborne radiometric, electromagnetic surveys and some grab sampling (small samples of rock and soil) for geochemical analysis.

Depending on the Phase 1 results, target areas will be delineated. If deemed worthy of follow up, ground-based surveys in the form of Reverse Circulation (RC) drilling will follow where

mineralization is suspected. Diamond drilling is unlikely as the targets are mainly situated in calcrete.

A typical drilling pad consists of a drill-rig, an area where the drill core and geological samples can be stored and a storage area for drill equipment, fuel and lubricants. The drilling pad, usually 15 m x 15 m in size, is cleared and levelled, barricaded, and off-limits to those not part of the exploration team.

For RC drilling the drilling mechanism is a pneumatic reciprocating piston known as a "hammer" driving a tungsten-steel drill bit. RC drilling utilises much larger rigs and machinery and depths of up to 500 m are routinely achieved. RC drilling ideally produces dry rock chips, as large air compressors dry the rock out ahead of the advancing drill bit. RC drilling is slower and costlier but achieves better penetration; it is also less costly than diamond coring. Open percussion drilling differs in that air is blown directly down the drill-hole to return rock samples to the surface.

Samples taken during drilling and soil surveys will be sent away for analysis, specifically to determine the mineral composition and the level of nuclear fuel minerals. Samples are taken during drilling by the geologist and can be in either rock, soil or drill core form.

4.3 Exploration Machinery, Vehicles and Support

During Phase 1 one pick-up truck will be used. Exploration will be done on foot and without making any new access roads / tracks. Nobody will stay overnight onsite, and the vehicle will also not be left onsite overnight.

During Phase 2 two pick-up trucks, one drill rig, one support truck for rods and one fuel truck will be used. Of these the drill rig will stay overnight onsite, for which permission will be requested from DWNP, but the other vehicles will not be allowed to stay overnight.

4.4 Water and Electricity Supply

Drinking water will be transported from Swakopmund to the field daily. If the project demands a bigger water need during Phase 2, a water tanker will transport water to site. The necessary authorizations will be arranged in such a case.

The equipment required for drilling have their own power supply and or fixed generators. No electricity is needed for any other purpose.

4.5 Fuel Supply and Storage

Diesel is the main consumable. However, no diesel will be stored onsite. A fuel truck will bring diesel to site for refueling of the stationery equipment. All vehicles will make use of the fuel station(s) in Swakopmund to refuel.

4.6 Access

Only existing access routes will be used during Phase 1 and all exploration onsite will be done on foot.

The main access to the sites will be via the C28 and D1982 roads (see Figure 1). During Phase 2, access tracks will be required to the specific drill sites, which will be rehabilitated after completion of the exploration activities, together with all other disturbed sites.

4.7 Employment and Accommodation

It is anticipated that only one to two people will conduct work during Phase 1, supervised by a geologist.

During Phase 2 a drilling team of up to 10 operators may be required (if drilling is justified by the results obtained during Phase 1). The drilling team will be supervised by a geologist.

No person will be allowed to stay onsite after hours. Personnel will stay in Swakopmund (or elsewhere) and transported to and back from site daily.

4.8 Waste

The following types of waste will be generated during the exploration activities, in relatively small volumes:

- Domestic waste (non-hazardous).
- Industrial waste (i.e., hydrocarbon contaminated material / soil) (hazardous). All refuse generated will be contained and removed from the site daily.

Domestic waste will be contained in a manner that there can be no discharge of contamination to the environment and will be removed from site daily, for disposal at the designated landfill site in Swakopmund. Recyclable items will be sorted and stored in temporary containers and removed to relevant recycling centres (where possible).

Drip trays will be placed under all stationery equipment and during refueling. Any oil spill will be scooped into bags and taken to a permitted disposal site.

Once a drilling site is established (during Phase 2), a portable toilet and ablution facilities will be placed onsite to ensure that sewage is contained and disposed of (off-site) appropriately.

4.9 Fire Management

Working areas, including drill pads, will be cleared of plant material – in case it is present – and anything that might increase the risk of starting an unintentional fire. To avoid starting a fire, smoking will only be allowed in dedicated smoking areas with a sand filled drum or similar container for disposal of cigarette butts. No food preparation will be allowed onsite. Furthermore, fire extinguishers will always be available onsite.

4.10 Rehabilitation

Post-drilling activities entail the rehabilitation of disturbed areas. Once the proposed exploration has been concluded on a specific work area, the impacted site will be rehabilitated to ensure a program of progressive rehabilitation and that no legacy is left behind.

5 DESCRIPTION OF THE CURRENT (I.E. BASELINE) ENVIRONMENT AND LINK TO ENVIRONMENTAL ASPECTS AND POTENTIAL IMPACTS

An understanding of the environment and its sensitivities is important to understand the potential impacts of the proposed exploration activities. This chapter provides a general overview of the current baseline conditions and considering the potential changes and subsequent management measures implied.

This chapter was compiled by utilizing the following sources of information:

- Atlas of Namibia (Mendelsohn et al., 2002).
- Atlas of Namibia: its land water and life (Atlas of Namibia Team, 2022)
- Site visits by Namisun (June and July 2024).
- Consultations and focus group meetings with I&APs, including consultations with relevant environmental specialists (June and July 2024).
- Consultations with MEFT officials – Park Ranger and Park Warden
- Specialist report – archaeology (Kinahan, 2024)
- Relevant documents by Namisun –
    - Environmental Scoping (including impact assessment) Report for the proposed Liquid Mud Plant for Services Pétroliers Schlumberger (SLB) in the Port of Walvis Bay (Namisun, 2023a)
    - Environmental Impact Assessment Report for the proposed Tumas Project and associated infrastructure in the Erongo Region of Namibia (Namisun, 2023b)
- Information retrieved from the internet:
    - www.nsa.org.na
    - www.mhss.gov.na
- Socio-economic information retrieved from several reports (IHME, 2016; WHO, 2016; NSA, 2017 and 2019)
- Google Earth.

Baseline environmental information relevant to EPL 9924 is described in this chapter.

5.1 CLIMATE

Namibia sits astride the Tropic of Capricorn, meaning that the country's weather patterns are dominated by quasi-stationary sub-tropical high-pressure systems. Off the coast, air from the South Atlantic High also sinks and spirals anticlockwise and outward, causing constant cool southwest winds, the Benguela Current and the upwelling cells of the ocean. Over the interior the

Kalahari High dominates, especially during winter when the subsiding air spirals anticlockwise and outward, causing cloudless days capped with a prominent inversion layer. As a result of their prominence, these two weather systems of an opposite direction collide along a line corresponding to the southwestern escarpment of Africa, most of the time.

Moreover, the cold Atlantic Ocean has a profound climatic influence over the land that borders it – climatically this part is referred to as Cool Desert. This narrow climatic zone stands in contrast to the arid climate of the central Namib Desert to the interior.

5.1.1 PRECIPITATION

During summer the positions of the two high-pressure cells fluctuate more, allowing low pressure cells to develop over the heated interior, which in turn pull moist air from the inter-tropical convergence zone. As the moist air from the north and the east moves south and west, the northeast parts of Namibia receive the most rain (>650 mm per annum) – diminishing in a direction to the south and west (<100 mm per annum).

Along the coast there is hardly any rainfall, but humidity is consistently high (between 70 – 90% throughout the year) and overcast days and foggy nights are common. Fog, associated with the humidity and the cold Atlantic Ocean is propelled by the prevalent flow of air from the South Atlantic High to the interior and causes a low but important precipitation figure along the coast. Along the coast a fog frequency of more than 50% of the time can be expected, in contrast to the <5% of the time that can be expected around 100 km from the coast (Atlas of Namibia, 2022), or about 600 meter above mean sea level (mamsl). Fog precipitation sustains a uniquely adapted ecology over this part of the Namib Desert though.

Rainfall events (over the interior) are limited to the summer months, between November and April, in the form of sudden thunderstorms, sometimes associated with heavy rainfall. As the rainfall decreases from north to south and from east to west, the rain season becomes shorter and starts later. January and February are the two months with the highest average rainfall over the entire country. The variation coefficient of rainfall increases proportionally to the decrease of total rainfall, resulting in a figure of >70% to the west and south of the country. In general, the potential evaporation increases proportionally to the decrease in total annual rainfall too, reaching a figure of >2,500 mmm per year in the south of the country. Ironically, the potential evaporation along the coast is the lowest because of the cold Atlantic Ocean, the lower temperatures and the higher humidity (Mendelsohn, et al., 2002).

Rainfall over the eastern part of the central Namib Desert, where both EPLs are located, can be described as extremely variable, patchy, unreliable, and marked by a coefficient of variation of

annual rainfall of 90 - 100%. Rainfall events are rare and episodic, with an expected total annual rainfall of less than 100 mm, an average annual evaporation of 1,960 – 2,100 mm, and a coefficient of variation of 90 – 100% in rainfall (Atlas of Namibia, 2022). In short, it means that the moisture shortfall exceeds 1,900 mm annually.

5.1.2 TEMPERATURE

Sea temperatures along the central part of the Namibia coast are rarely warmer than 20°C. As a result of the sinking air over the cold Atlantic Ocean, temperatures close to the coast are moderate. Average annual temperature is less than 16 °C, the average minima are between 10°C and 11°C, the average maxima are between 28°C and 29°C and the average diurnal temperature range is <10°C. Summer months (December, January and February) are not necessarily marked by higher temperatures, whereas the winter months (June, July and August) are marked by a possibility of recording the highest temperatures and a wide fluctuation between minimum and maximum temperatures (Namisun, 2023a).

Solar radiation over the entire country is high and increases during summer when the hours of sunshine increase. Radiation is the highest over the western and southern parts of the country as cloud cover is less and the highest total hours of sunshine is recorded. The coastal areas have lower radiation values because of frequent overcasting and fog. Also, as humidity remains high and onshore winds and fog or low cloud cover are persistent along the coast, temperatures are mild for most of the year (Atlas of Namibia, 2022).

Average temperatures are closely coupled to solar radiation and the average maximum figures are also recorded in the west and south of Namibia, often exceeding 36 °C between October and February. Despite the higher radiation over the western and southern parts of the country, the generally low humidity over these parts means that heat is sometimes lost rapidly at night, implying wide diurnal temperature ranges, often greater than 20°C – in contrast to the coast where the average diurnal temperature ranges are the lowest (Atlas of Namibia, 2022). For the country in general the lowest temperatures are recorded between June and August when the sunshine hours are shorter, and the cooling of the earth surface is the highest.

The lack of precipitation over the central Namib Desert is coupled with demanding temperatures. Average diurnal temperature ranges are 14 - 16°C, average minima are 10 - 12°C and average maxima are 28 - 30°C. This part of Namibia is also known for its high temperatures. Gobabeb, also located in the central Namib Desert, has the record for the highest temperature ever measured in Namibia – 45.5°C in March 2013 (Atlas of Namibia, 2022). Little seasonal variation in temperature is shown and high temperatures are experienced all year round. Temperatures

recorded for the proposed Tumas Project, adjacent to EPL 9924, show a maximum reading of 42°C, a minimum of 4°C and an average of 19°C (Namisun, 2023b).

5.1.3 WIND

Along the coast, the south and southwest wind which originates from the South Atlantic High and blows over the cold ocean, is responsible for the prevailing wind direction and dominates daytime and night-time wind patterns. These wind components are characterised by a high frequency of moderate to strong wind speeds (Namisun 2023a).

Occasional eastwinds (more accurately, from the northeast) blow during winter over the central Namib Desert and coastal parts of Namibia, because of cold sinking air over the interior that descends along the escarpment and flows towards the coast. This air heats up (adiabatic warming) as it blows towards the coast, and result in the recording of higher temperatures, often exceeding 30°C. Important, these hot, dry winds have a profound desiccation effect on the coast, and relative humidity figures drop noticeably during these events (Namisun, 2023a).

Along the coast the highest windspeed as well as the highest wind gusts are recorded in August, i.e. when the potential diurnal range of temperatures are the widest. This situation is associated with eastwind episodes. In April, from June to August, and in October wind gusts are the highest – most likely associated with eastwind episodes between April and August, and most likely associated with strong south-southwest and south winds during October. During eastwind episodes windspeed may exceed 20 km/h and the wind gust may exceed 40 km/h. Except the higher temperatures and drier conditions, eastwinds are loaded with dust from the interior Namisun, 2023a).

Wind data recorded between March 2018 and July 2021 for the proposed Tumas Project show an average windspeed of <4.7m/s and that calm conditions prevail 8% of the time. Windspeed falls mostly in the 5-7 m/s category, with windspeed exceeding 5 m/s occurring for 29.5% of the time and exceeding 10 m/s occurring for 4.9% of the time. The maximum windspeed recorded was 17 m/s. During the day west-southwest winds prevail, with strong but infrequent winds from the northeast. At night, the wind field shifts to more frequent but weaker west-northwest winds. In summer the winds are predominantly north-west, west and west-northwest, changing to west-southwest during autumn. During winter high-speed winds from the northeast dominate. These eastwinds disappear during spring with the return of winds from the west, west-southwest, northwest and west-northwest. Windspeed between 6-8 m/s equate to a moderate breeze, while windspeed between 14 - 17 m/s are near gale force winds. When the windspeed exceeds 10 m/s,

erosion is estimated to occur on open and exposed surfaces – even on a crusted surface with loose fine material. (Namisun, 2023b).

5.1.4 CLIMATOLOGICAL LINKS TO ENVIRONMENTAL SENSITIVITY

The aridity of the central Namib Desert is manifested by means of a low, unreliable precipitation, a high deviation potential, significant moisture losses in the form of evapotranspiration, sunny, cloudless skies, demanding temperatures and a persistent wind regime.

Climate is one of the abiotic factors that underpins biodiversity, and in the case of the central Namib Desert the rhythmic climate cycles are decisive, determining the time-spatial occurrence, variation (and sensitivity) of biodiversity in EPL 9924.

5.2 LITHO-PEDOLOGY

5.2.1 GEOLOGY

On a regional scale, the oldest outcrops in the central coastal zone of Namibia are mainly rocks of the Archean to Phanerozoic eras. These metasediments are underlain by inliers of basement gneiss domes and abundant granite plutons belonging to the Abbabis Metamorphic Complex. The geology of this zone is dominated by the Swakop and Nosib Groups of the Damara Orogeny which consists of high-temperature, low-pressure metamorphosed sediments.

Inland, the Abbabis Metamorphic Complex, pre-Damaran in age, is overlain unconformably by Damara metasediments which generally rise to elevations of about 50 m above the alluvial surface of the central Namib Desert plains. On the surface the Namib Desert is covered by alluvial sediments of the Namib Group (Early Miocene), which have been formed by a combination of fluvial, estuarine, coastal and aeolian processes (SLR, 2022 referenced in Namisun 2023a).

Surficial uranium deposits occur mainly in fluviatile environments on the plains of the central Namib Desert. These deposits are hosted in paleochannels of ancient river systems that flowed westwards from the escarpment during the Upper Cretaceous and Lower Tertiary. Generally, the paleochannels cross the central Namib Desert from east to west. The fluviatile sediments within the paleochannels are collectively referred to as the Namib Group sediments and unconformably overlie the basement rocks of the Damara Sequence and the Abbabis Metamorphic Complex (Namisun, 2023b).

Granitic rocks of various ages occur throughout the basement, some of which are enriched in uranium and probably constitute the source rocks for surficial uranium mineralisation in the Namib Group sediments. The Namib Group sediments are up to 100 m thick in places and commonly cemented by calcite, dolomite and or gypsum. Carnotite, a bright yellow uranium vanadate is the

main ore mineral and occurs interstitially along grain boundaries, filling cavities and fractures (Namisun, 2023b).

5.2.2 TOPOGRAPHY

EPL 9924 is located where the terrain gently slopes from 909 mamsl in the east to 748 mamsl in the west, over just more than 13 km. The EPL is characterized by a flat desert pavement, dominated by weathered calcrete with generally subdued relief exposures of granite, gneiss and schist. The flatness of this landscape is interrupted by occasional outcrops or otherwise dissected by an extensive network of shallow and wide dry washes, all oriented westwards. Shifts in horizontal alignment and vertical incision of these drainage lines over time resulted in sublime, gradual transitions between landscape features, evident from the orientation of current washes and paleochannels. Some of the current washes are lined by terraces, left behind as remnants of a former landscape.

5.2.3 SOILS AND SURFACE COVER

Although the soils of the central Namib Desert were formed by mechanical and chemical process over millennia, most of the soils are shallow, infertile lithosols. The washes contain deeper fluvial sands and unconsolidated sediments though – concentrated along the flowlines.

The pavement of the central Namib Desert is mainly covered with quartz and calcrete pebbles and other rock debris on skeletal lithosols. Over the western parts of the central Namib Desert gypsum-rich soils (gypsisols) dominate. Gypsisols were formed by the reaction between frequent sulphurous mists blowing off the sea with surface limestone to form gypsum as a replacement of the calcite. In most cases these soils (gypsisols) are distinctively darker and have in general a high concentration of salts and hydrogen sulphide, which in return intensifies chemical processes and soil genesis. Generally, gypsisols correspond to areas where lichens grow on the gravel plains, supported by fog.

Gypsum crusts are extremely fragile and very easy to damage with off-road driving and show no measurable regeneration after disturbance. Once the crust has been disturbed, wind erosion removes the subsurface sandy material, which exacerbates the problem of rehabilitating surface disturbance where there is a combination of gypsum crusts overlaying an unconsolidated sand stratum (Namisun, 2023b).

Gypsum crusts are a rarity in EPL 9924, however. Where the fog over the central Namib Desert is less frequent to the east – like in EPL 9924 – the occurrences of gypsisols decrease, and surface and subsurface calcrete, often marked by calcrete nodules and pebbles, are common.

Here lime (calcium carbonate) from the calcrete was redistributed and accumulated in a skeletal surface layer, called calcisols.

5.2.4 PEDOLOGICAL LINKS TO ENVIRONMENTAL SENSITIVITY

Indicators of soil fertility such as organic matter, total and plant available nitrogen (N), phosphorous (P), cations and the abundance of microbial and anthropoid decomposers are generally low in desert soils but concentrate under plants and other forms of shelter, forming a thin layer (in the topsoil). Direct inputs of organic matter such as plant litter transported by wind and water, as well as dung and urine from animals create and maintain these relative fertile pockets. The destruction of plants causes a loss of these nutrients from desert ecosystems (Namisun, 2023b).

Gypsum crusts are scarce to absent in EPL 9924. Instead, the EPL is subject to the deflationary (erosive) action of wind. Wind removes the fine material easily and polishes the larger fragments that remain behind. The result is a pavement almost entirely covered with gravel. These pavements cannot resist mechanical pressure, e.g. offroad driving, which leaves semi-permanent indentations. In this way the gravel desert pavement is as sensitive as the fragile gypsum desert crusts found further west.

Soil loss and soil contamination can have adverse impacts on desert ecology. Some organisms are directly dependent on soil and the surface cover, others affect the reproductivity of the soil. Disturbance of the soil can thus be detrimental in some cases. Soil health is also interconnected to the quantity and quality of both surface and groundwater – soil contamination can directly lead to water contamination, for example.

5.3 SURFACE AND GROUNDWATER

As stated in Section 5.2.2, the flatness of the landscape where EPL 9924 is located slopes westward, mainly the result of an extensive network of shallow and wide dry washes, all oriented westwards. Relationships between the current drainage lines and (their) paleochannels and between the present landscape and former climatic times are not obvious though.

Surface run-off in EPL 9924 ends up in a tributary of the Tubas River – the northern leg of the Tumas-Tubas River Catchment. EPL 9924 is thus part of this endoreic catchment (it ends without a visible mouth) and is separated from the Kuiseb River Catchment in the south and the Swakop River Catchment in the north. The Tumas River forms the southern and the main channel of the system, meandering northwest through the landscape before it is joined by the Tubas River which is flowing west. Both rivers consist of many smaller tributaries. A mud-filled series of depressions

on the inland side of the dune belt between Walvis Bay and Swakopmund marks the end of this river system. Interestingly, on the ocean's side of the dune belt, opposite its end, a Salsola hummock field occurs, evidently fed by underground water from the system (Namisun 2023b).

Several drilling campaigns to install bores for groundwater production and monitoring have been undertaken in the Tumas River Catchment between 2010 and 2022 (Namisun, 2023b). Three of the groundwater-bearing systems have been intersected, identified as the shallow alluvium, paleochannel aquifer and the fractured basement aquifer. The thickness of the aquifers varies across the area drilled (Namisun 2023b).

The thickness of the alluvial aquifer is likely between 2 and 3 m deep and consists of surface sand, gravel, calcareous sand, silt and conglomerate derived from surficial drainage and wind deposits. On the surface the alluvium is dry and porous, meaning that occasional surface water infiltrates it easily. Like elsewhere in the central Namib Desert, the alluvial aquifer is occasional fed by seepage from bedrock or from paleochannels below. This often result in springs, functioning mostly seasonal. One such a natural spring occurs at the Hotsas Waterhole near EPL 9924 (see Figure 1).

The paleochannel aquifer comprises of sandy conglomerate, calcareous grit, calcareous silt / clay, and calcareous conglomerate, overlain by surface alluvium. This aquifer likely follows a similar flow path as the Tumas River and Tubas River. Monitoring boreholes drilled along the Tumas River revealed that the thickness of the paleochannel varies between 6 and 110 m. In the case of the Tubas River the paleochannel aquifer comprises unconsolidated sand and gravel at depths of >50 m and yields of < 50 m^3/h have been demonstrated (Namisun 2023b).

The fractured basement aquifer is locally overlain by the paleochannel and or river alluvium and sometimes outcropping. Granitic rocks of various ages occur throughout the basement, some of which are enriched in uranium and probably constitute the source rocks for surficial uranium mineralisation in the Namib Group sediments. Monitoring boreholes have been drilled into the fractured basement intersecting biotite-rich pelitic schist, granitic pegmatite, quartzite and feldspathic quartzite psammite and marble of varying permeability (Namisun, 2023b).

Six possible production boreholes were drilled as part of the Tumas Project between December 2021 and March 2022. Five of the boreholes were successful as production boreholes, and one has shown a low yield and is used as a monitoring borehole. To ascertain their capacity and to determine the rates at which they can be pumped sustainably the production boreholes were test pumped. The aquifer parameters obtained from the tests were used as input to a flow model composed by SLR in 2022. Also, water from 29 boreholes was used to determine groundwater

levels, to analyse and represent groundwater quality and to determine hydrochemistry (Total Dissolved Solids, uranium concentrations and radionuclides). In conclusion, groundwater levels vary widely – from 2 - 7 m deep in the alluvial aquifer to between 2 and 50 m in the paleochannel and basement aquifers. Groundwater quality in the Tumas-Tubas River Catchment is classified as moderately to highly saline water and not suitable for human consumption (Namisun 2023b).

Water for the Hotsas Waterhole near EPL 9924 is obtained from a borehole with a windmill. The water is suitable for animal consumption, but it is not known if it is suitable for human consumption too. The original nearby Hotsas Spring was terminated by covering it with rocks and the permanent borehole was drilled instead to ensure that the water supply for animals is continuous (pers. comms. R. Salomon, July 2024).

5.3.1 HYDROLOGICAL LINKS TO ENVIRONMENTAL SENSITIVITY

In a desert environment most surface water after a light shower either evaporates or percolates into the ground. Surface runoff is a rarity and occurs only after an episodic heavy rainfall event. Despite the aridity of the Namib Desert, water is a key driver of its environment – in terms of consumption by flora and fauna and as an agent to transport, mix and distribute nutrients, seed, organic matter and soil.

EPL 9924 is part of the Tumas-Tubas River Catchment, which is almost entirely located within the NNNP and to a large extend exempted from human interferences. Water can be quantitatively as well as qualitatively affected by human activities. Human activities have the potential to alter the drainage of surface water through the placement of both temporary and permanent infrastructure and can cause the contamination of water resources.

5.4 BIODIVERSITY

Although the northern section of the NNNP is marked with a considerable level of road, pipeline and powerline infrastructure development as well as several mining- / exploration-related activities, EPL 9924 is situated within a part of which the biodiversity of large parts is still undisturbed. Due to the many EIAs that have been conducted for related developments, a good understanding of the biodiversity of the northern section of the NNNP exists, appreciating also the importance of its landscape diversity and associated climatic variation. Moreover, extensive databases exist in some cases and some of the taxonomic groups and habitats of the northern NNNP have been extensively surveyed, consequently.

Compared to other parts of Namibia, where precipitation is more, the overall biodiversity of the northern section of the NNNP is low, but with a high level of endemic species that have restricted

distribution ranges. The most impressive levels of endemism are found in the less noticeable groups, namely reptiles including geckos and sand lizards, and among invertebrates including beetles, scorpions and solifuges. Species in these groups display many remarkable adaptations that allow them to survive in this part of the Namib Desert (Namisun, 2023b).

5.4.1 FLORA

Vegetation structure is described as sparse shrubs and grasses (Atlas of Namibia, 2022). *Stipagrostis* sp is the dominant grass species over the entire EPL 9924. Perennial vegetation, including trees, are mostly confined to drainage lines where sandy alluvium occurs. Where the alluvium is accumulated in depressions or as hummocks, *Salsola nollothensis* are common. Except on the main riverbeds where occasional water flow prevents the establishment of longer-lived plants, the drainage lines generally support denser vegetation with *Salsola nollothensis*, *Zygophyllum stapffii* (dollar bush) dominant and populations of *Psilocaulon salicornioides* and *Pechuel-Loeschea leubnitziae* also present (Namisun, 2023b). Mature *Acacia erioloba* (camelthorn) occurs throughout EPL 9924 within the valley of the drainage lines.

No inselbergs or outcrops occur in EPL 9924. However, there is good reason to expect some species that are closely associated with higher elevations to be incidentally present. This includes *Aloe asperifolia, Commiphora saxicola, Hoodia sp., Kleinia longiflora* and *Lavrania marlothii*. All these plants are small, not growing taller than 0.5 m (Namisun, 2023b).

Around 206 plant species may be expected in the broader landscape. On the nearby Tumas Project tenement, about 15 km southwest of EPL 9924, 96 of these plant species have been recorded. All trees recorded – *Acacia erioloba, Euclea pseudebenus, Tamarix usneoides* – are protected species, so is the stem-succulents *Adenia pechuelii, Aloidendron dichotomum, all Commiphora* species and the nara plant (*Acanthosicyos horridus*) and *Welwitschia mirabilis*. Seven of the 206 listed species are restricted to the central Namib Desert and two of these (i.e. *Aizoanthemum galenioides* and *Ammocharis deserticola*) have already been recorded on the Tumas Project tenement. Other protected plants found on the Tumas Project tenement include the bulb *Ammocharis deserticola*, and the stone plants (*Lithops gracilidelineata* and possibly *L. ruschiorum*). Three additional species have not been found yet but were recorded in similar habitats in the vicinity of the Tumas Project tenement; these are the herbs *Cleome foliosa* subsp. *namibensis* and *Helichrysum marlothianum* to the north and the bulb *Raphionacme haeneliae* to the south-east in the Ganab area and in the upstream parts of the Tumas River (Namisun, 2023b).

Based on the occurrence of these species on a tenement nearby, there is good reason to believe that most of these species may also be present in EPL 9924.

5.4.2 FAUNA

The parts of the central Namib Desert where EPL 9924 is located are regarded as “low” in overall (all terrestrial species) diversity while the overall terrestrial endemism on the other hand is “moderate to high” (Mendelsohn et al. 2002). An estimated (i.e. at least) 54 reptile, five amphibian, 49 mammal and 130 bird species (breeding residents) are known / expected to occur in the Tumas Project tenement, about 15 km southwest, of which a high proportion are endemics (e.g. 53.7% for reptiles). The 54 reptile species expected to occur consist of at least 18 snakes (two thread snakes, one quill snouted and 15 typical snakes) of which eight species (44.4%) are endemic, one tortoise, one terrapin, 14 lizards of which six species classified as endemic (42.9% endemic), one plated lizard, one monitor, one agama, one chameleon and 15 geckos of which 13 species classified as endemic (i.e. 86.7% endemic) (Namisun, 2023b).

Gecko’s (15 species with 13 species being endemic) and snakes (18 species with 8 species being endemic) are the most important groups of reptiles expected on the Tumas Project tenement, followed by lizards (14 species with 6 species being endemic). Geckos expected and or known to occur in the general area have the highest occurrence of endemics (86.7%) of all the reptiles (Namisun, 2023b).

The endemic African flat gecko (A*froedura africana africana*) and Husab sand lizard *(Pedioplanis husabensis*) are viewed as the most important reptiles potentially occurring on the Tumas Project tenement. The Husab sand lizard is viewed as “threatened” by development with its total known range currently estimated at <5,000km² which would put it in the “endangered” category according to the International Union for Conservation of Nature (IUCN) Red List Categories and Criteria. The Western thread snake (*Leptotyphlops occidentalis*) and Namibian wolf snake *(Lycophidion namibianum*) are the snakes viewed as the most important in the Tumas Project tenement. At least five species of amphibians could occur in suitable habitat. Two of these (*Poyntonophrynus hoeschi* and *Phrynomantis annectens*) are endemic, although widespread throughout Namibia (Namisun, 2023b).

At least 49 species of mammals are known and / or are expected to occur in the Tumas Project tenement of which eight species (16.3%) are classified as endemic. At least 14 species of the mammalian fauna that occur or are expected to occur are represented by rodents of which three species are endemic. This is followed by bats with 13 species of which one species is listed as endemic and rare and carnivores with 11 species of which one species is endemic and five species listed as vulnerable. The most important species are the Namibian wing-gland bat (*Cistugo seabrai*) listed as endemic and rare; Littledale’s whistling rat (*Protomys littledalei*

namibensis) listed as endemic; brown hyena (*Parahyaena brunnea*) and leopard (*Parthera pardus*) listed as near threatened and vulnerable (population trends decreasing). None of the unique / important mammal species are exclusively associated with the Tumas Project tenement though (Namisun, 2023b).

Little substantive information about invertebrate species and communities for the Tumas Project tenement exists. This is because it is difficult to detect invertebrates outside of the brief periods in response to episodic events such as sufficient rain and flash floods and their associated vegetation growth. During dry episodes these organisms are in diapause, dormant or inactive. In the Tumas Project tenement no particular invertebrate species, wholly or partially endemic to the area, or populations of conservation concern were identified during the surveys for the EIA. A diversity of specialised psammophilous (living or growing in sand), Salsola-associated, nest- and burrow-associated (nidicolous), coprophilic and geographically isolated (relict) species and communities are likely, though. Some unusual spiders, scorpions and flies, unidentified, were observed in this habitat (Namisun, 2023b).

Considering the occurrence of fauna in the Tumas Project tenement, it can be expected that the scenario in EPL 9924 will be similar.

5.4.3 AVIFAUNA

At least 130 species of terrestrial birds (“breeding residents”) occur and / or could occur in the wider landscape. Hereof, seven of the 14 Namibian endemics are expected to occur, as well as Rüppell’s parrot – a near endemic. Furthermore, seven species are listed as endangered (Ludwig’s bustard, white-backed vulture, black harrier, martial eagle, tawny eagle, booted eagle, black stork), two species as vulnerable (Lappet-faced vulture, secretarybird) and five species as near threatened (Rüppell’s parrot, Cape eagle owl, kori bustard, Verreaux’s eagle and peregrine falcon). Forty-three species have a southern African conservation rating with nine species classified as endemic and 34 species classified as near endemic. One species is classified as critically endangered (white-backed vulture), three species as endangered (Ludwig’s bustard, lappet-faced vulture, black harrier), three species as vulnerable (martial eagle, tawny eagle, secretary bird) and one species as near threatened (kori bustard), according to the IUCN list (Namisun 2023b).

The most important birds known or expected to occur in the wider landscape are all the endemics, especially Rüppels korhaan, Gray’s lark and Herero chat. Gray’s lark is one of the species with the most restricted range in Namibia. Other important species are the birds listed as endangered (Ludwig’s bustard, white-backed vulture, black harrier, martial eagle, tawny eagle, booted eagle,

black stork), vulnerable (Lappet-faced vulture, secretarybird) and near threatened (Rüppell's parrot, Cape eagle owl, kori bustard, Verreaux's eagle and peregrine falcon) and the species classified as critically endangered (white-backed vulture), endangered (Ludwig's bustard, lappet-faced vulture, black harrier), vulnerable (martial eagle, tawny eagle, secretary bird) and near threatened (kori bustard) by the IUCN (2021).

5.4.4 ECOLOGICAL FUNCTIONING AND LINKS TO ENVIRONMENTAL SENSITIVITY

Plant productivity in the Namib Desert is highly variable between years and correlates with rainfall. Also, there exists pockets of high productivity – closely coupled to soil, topography and water flow. Mineralization of organic material is limited to these (predominantly) short periods of high soil moisture. During the brief wet periods, erosion may occur, and nutrients, seed and soil are also transported, redistributed and redeposit. Any surface alteration that interferes with these interactive systems because of human activities, can have an adverse effect on the productivity of the desert ecosystems, thus.

Herbivoric utilization of the vegetation after episodic rainfall events is generally for a short period, selective and of a low intensity, therefore a large proportion of vegetation is left standing as dry biomass and shows a slow decline. Whereas the herbivoric consumption of (new) palatable plant material is incidental, the utilization of dry palatable plant material is over a longer period. Seed is harvested and consumed by granivores such as ants, rodents and birds while the finer material is removed by soil detritivores such as termites, mites and isopods, while deadwood and tough stems remain on the surface for years (Namisun, 2023b). Moreover, it means that any human interference with the vegetation in a desert environment can be negative to the food reserves of herbivores, granivores and detritivores.

One of the keystone species of the central Namib Desert is camelthorn trees *(Acacia erioloba*). It is also a protected species. In the dry wash that passes Hotsas, a tributary of the Tubas River, the concentration of mature camelthorns stands in stark contrast to the almost barren surrounding plains. Camelthorns are slow-growing trees, and sensitive to abrupt changes in groundwater availability. Not only do they provide shelter for many animals – including nesting birds – but they also provide fodder (in the form of leaves and pods) for a wide range of animals. Camelthorns must not be disturbed and the underground water supply and the water quality on which this tree relies must not be compromised. (Namisun, 2023b).

Habitat alteration and overutilization are the two primary processes threatening most mammals while sedentary species, like rodents, are adversely affected by infrastructure developments – and its associated impacts like noise, obstructions, etc.

Reptiles are generally understudied animals and occur at low densities in marginal habitats, implying that many more species are expected to occur in the wider landscape of the northern NNNP.

Birds are undoubtedly affected by localised rainfall events and the availability of water, food and shelter. In the central Namib Desert this means that many of the bird species may be absent for long times and can occur only occasionally. It means also that unexpected species may occur. None of the above-mentioned bird species are exclusively associated with the landscape of which EPL 9924 forms part. Although the entire NNNP is classified as an Important Bird Area (IBA), the part where the EPL is quite far from the other IBAs outside the NNNP – the closest are at Walvis Bay, Sandwich Harbour and at Mile 4 Saltworks.

The denser stand of mature camelthorns trees around the Hotsas Waterhole are used by lappet-faced vultures (*Torgos tracheliotos*) to reside during their breeding cycle. As the waterhole is permanent and the only water available in a vast piece of the park, many animals visit the waterhole. There is thus always a good possibility for available food, on which the vultures can scavenge. Lappet-faced vultures are known to prefer open, flat areas with big trees to breed – one of the reasons why they are absent in the trees within the Kuiseb and Swakop River valleys where the surroundings are undulated. Furthermore, they use the waterholes to socialize (pers. comms. P. Bridgeford, July 2024). See also Section 3.4.3 and Section 5.7 regarding the Park Management Plan's reference to the Hotsas Waterhole.

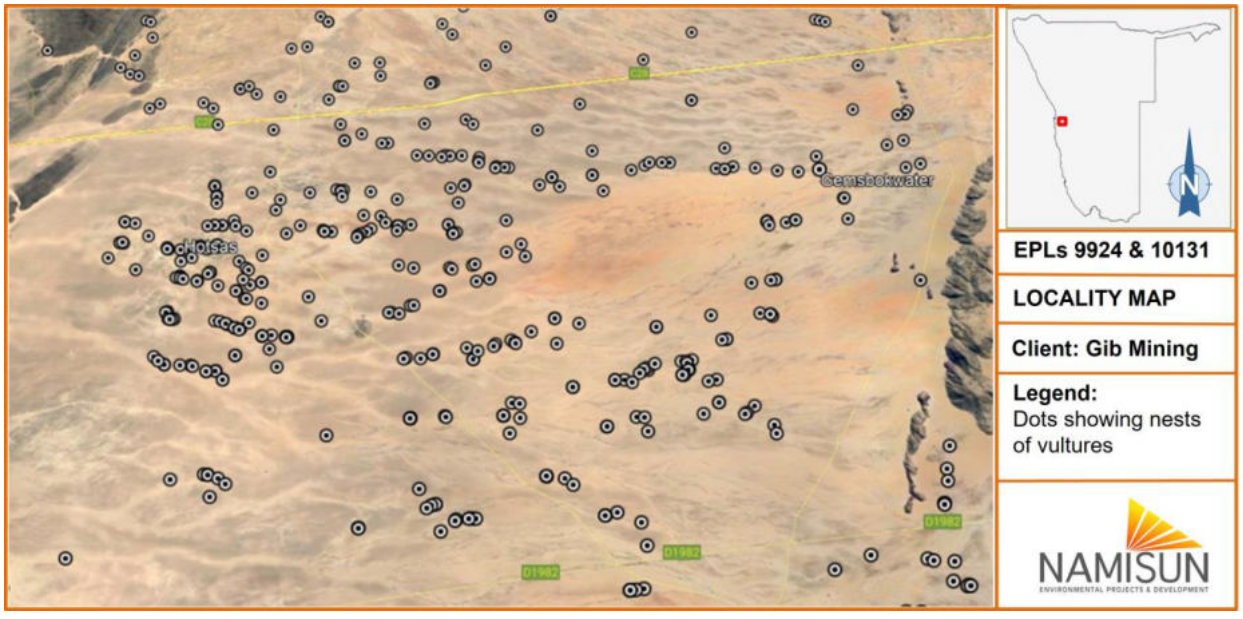

FIGURE 5: RECORDED VULTURE NESTS IN THE CENTRAL NAMIB DESERT

(Source: Vultures Namibia, 2024)

Many vulture nests occur in the camelthorn trees around Hotsas (see Figure 5). Not all nests are occupied though, and nests are often used again in two- or three-year cycles. Breeding vulture pairs will avoid using the same nest season after season because of parasites. The birds pair and choose their nests between January and March. During this time, they socialize and move around still. Anytime between March and June, they start to renovate or build their nests, lay an egg (only one egg) and sit on it for 60 days. When the chick hatches, the parents look after the chick for about six months (i.e. until November / December). This means that the vultures are very sensitive to disturbance between March and November (pers. comms. P. Bridgeford, July 2024).

From key stakeholders it was learnt that poaching is a contentious management issue in the NNNP. Combined with the current long dry spell, the numbers of many (huntable) animal numbers have dwindled. Poaching is mainly done for meat consumption; the illegal hunting is done by syndicate operations that sell the meat in Swakopmund, Walvis Bay and Windhoek. It is also believed that poaching activities are on the increase, due to the vastness of the NNNP which makes patrolling and protection by the staff of the DWNP challenging and limits effective support from crime prevention agencies (pers. comms. R. Salomon, July 2024).

Although GIB Mining can commit to a zero tolerance on any criminal offence by its employees, including poaching, it is the sharing of information about the movement and presence of animals that is a more challenging issue to manage. On the positive side, the presence of employees of GIB Mining in an area targeted for poaching may inhibit this criminal activity and can assist with the monitoring of such activity (in the short term).

5.5 ARCHAEOLOGY

Baseline surveys for the nearby Tumas Project tenement were done since 2010, with additional field surveys carried out by Dr John Kinahan in October 2021. However, no recorded surveys were done in EPL 9924 specifically. A reconnaissance survey was therefore carried out by Dr Kinahan in EPL 9924 in July 2024, to locate and document the most important archaeological features. The following section was sourced from Dr Kinahan's report.

The Namib Desert is recognized as a globally important archaeological landscape, having abundant evidence of human settlement spanning the last one million years. Of particular interest and significance are archaeological sites dating to within the last 12,000 years, a period of marked climatic instability that brought many changes in human settlement and subsistence behaviour. This period, the Holocene, commenced with the onset of warm, moist conditions following the Last Glacial Maximum, and saw a rapid expansion of human occupation over the entire Namib

Desert. A sudden onset of arid conditions about 5,000 years ago caused a general retreat from the desert to refugium sites along the western escarpment. Systematic archaeological studies have shown the development of food gathering and processing techniques during this period, as well as the existence of extended social networks maintained by mutual gift exchange. Of major significance is the elaboration of a complex ritual rock art tradition linked to the rise of specialized shamans, or ritual practitioners. During the last 2,000 years, hunter-gatherer communities in this area acquired domestic sheep and pottery, establishing a highly productive semi-nomadic pastoral mode of subsistence (Kinahan, 2024).

An essential component of the late pre-colonial Namib Desert economy was the extensive and highly specialized use of wild food plants including grass seed obtained from the underground storage caches of harvester ants *Messor denticornis*. The use of this food source enabled desert communities to achieve a measure of food security which seems to have resulted in a growth of the human population during the last two thousand years. The archaeology of these adaptations is subtle and requires detailed analysis of a range of related evidence, including that of pottery, site position and layout as well as isotopic evidence which allows the reconstruction of human diet from skeletal remains (Kinahan, 2024).

Seed digging sites, many of them, are present in and near EPL 9924. Localized groups of as many as 100 seed diggings, mainly on weathered calcrete and clustered as 12 sites, were recorded in or near EPL 9924 (see Figure 6). Also recorded in EPL 9924 were bedrock seed grinding surfaces, small shelters and a group of “ringing stones” at the southern point of a dolerite dyke adjacent to the lease. Widespread in the Namib Desert, “ringing stones” sites have one or more highly polished surfaces resulting from being used as rubbing posts by animals. It is possible that the “ringing stones” played a role in hunting. Also associated with the dolerite dyke adjacent to EPL 9924 is a highly unusual site, one of only three such sites so far recorded in the Namib Desert, that is thought to have been used for men’s initiation into the practice of communal hunting (Kinahan, 2024).

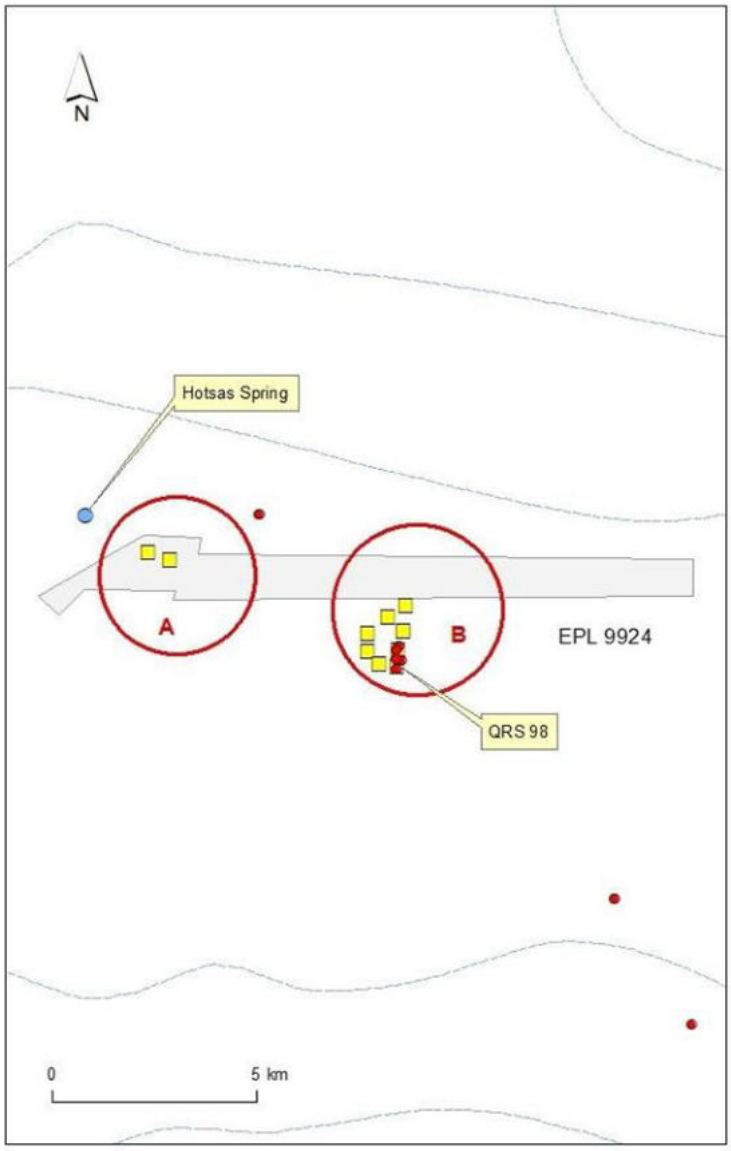

FIGURE 6: RECORDED ARCHAEOLOGICAL SITES IN AND NEAR EPL 9924

(Red dots show site previously recorded, yellow squares show sites recorded in 2024. Area A and B indicate the concentrations of seed digging sites. Source: Kinahan, 2024)

5.5.1 ARCHAEOLOGICAL LINKS TO ENVIRONMENTAL SENSITIVITY

The sites recorded in and close to EPL 9924 are representative of late pre-colonial settlement in the central Namib Desert. In general, the sites exemplify a particular mode of subsistence with a degree of reliance on the gathering and processing of wild grass seed, a form of human adaptation that is unique in southern Africa.

Except for the "men's initiation site" (outside EPL 9924), all other sites in EPL 9924, i.e. grass-digging sites, have a generally low significance and low vulnerability rating. The "men's initiation site" has a highly significant rating and deserve more detailed documentation than was possible during the present survey. The site should be considered as a "no go" area during the proposed exploration activities, but it is recommended that GIB Mining should be otherwise given consent to proceed with their planned activities (Kinahan, 2024).

5.6 Brief Socio-economic Baseline

The last national census in Namibia was conducted in 2023 and counted 3,022,401 million people, an increase of 30% since the census of 2011 (www.nsa.org.na). Where not otherwise referenced, the text below is based on this online-based preliminary results of the 2023-census.

5.6.1 Demographic profile

Being the second least densely populated country in the world (3.7 persons per km^2), vast areas of Namibia are without people, while some parts are densely populated, such as the central-north and along the Kavango River. Population densities in the country vary thus a lot – in the Erongo Region it was 3.8 persons per km^2, in the Ohangwena Region it was 32 persons per km^2, and in the ||Karas Region 0.68 persons per km^2 in 2023.

In the 2023-census the urban-rural spread of the population in Namibia was almost 50-50. However, this figure is skewed by the primacy of Windhoek which accommodates >15% of the total Namibian population. In the Erongo Region 89% of the total population live in urban areas, of which 83.2% live in Swakopmund and Walvis Bay alone and only 5.8% live in all the other towns together – Arandis, Henties Bay, Karibib, Usakos and Omaruru. This also means that only 11% of the region's total population live in its rural parts – which includes the unpopulated Dorob Park and NNNP, indicating the low population density of the region outside urban areas.

In 2023 the total population of the two constituencies of Walvis Bay was 103,115 people, existing of 31,747 households of an average household size of 3.2. In Swakopmund there was 75,921 people counted in 2023, existing of 24,424 households with an average size of 3.0. In general, the Erongo Region's population increased by 53% since the last census of 2011.

Living in an urban environment implies better living conditions – access to safe water, sanitation and electricity, and access to educational, medical and financial services and facilities such as amenities and recreation. However, a higher figure of the number of people living in an urban area in Namibia does not indicate how many households still live in substandard housing (shacks, backyard shacks and other informal shelters), how many people still live in poverty, how many

people are unemployed and how many people still are deprived from a civilized living standard after three decades of independence. In the case of Walvis Bay, it is estimated that almost 80% of the population live in the low-income neighbourhoods (Ashby, 2022, referenced in Namisun, 2023a), for example.

Namibia's population is young – 37% was younger than 14 years of age and >46 % of the total population was younger than 19 years of age in 2023. The percentage of working age population (15 – 59 years of age) was 56.1% and only 6.8% was older than 59. Although a young population presents a high employability, it presents also high dependency ratios, education demands, health care needs, employment challenges and urbanization pressures, which in turn demands effective policies on these fronts.

5.6.2 EMPLOYMENT

The labour force participation rate is the proportion of the economically active population, given as a percentage of the working age (i.e. older than 19) portion of the population. More people in the working age are active in the Erongo Region's labour force than in any other region in Namibia (Ashby, 2022, referenced in Namisun, 2023a). The rate of labour force participation for the region was 80.9% compared to the average of 71.2% for Namibia in 2018 (NSA, 2019).

Nationally, a large portion of Namibia's young population is indeed unemployed. Using the broad definition of unemployment, the NSA estimated that 33.4% of all Namibians from a working age was unemployed in 2019 (NSA, 2019). There is also a strong correlation between unemployment and low or inadequate education. Of all employed people in Namibia, 63.5% are not higher qualified than junior secondary level (Grade 10 and lower) and the highest unemployment rates are found amongst persons with education levels lower than junior secondary (NSA, 2019). Moreover, the low education levels affect employability and prevents many Namibian households to earn a decent income.

Using the unemployment rate of 33.4%, it means that one-third of the national population is unemployed, and another 46% is younger than 19 years of age, i.e. 79.4% in total. Just more than 20% of the population (one out of five people) is thus economic active – and this portion includes the 6.8% of the population that is older than 60 years of age. Moreover, it means that for every economic active person there are four dependent persons. With such a small base of economic active people, there is thus constant pressure on the individual and household income of economic active Namibians – not only in terms of taxes but also in terms of support to those without an income.

In the Erongo Region 67.5% of all households depend on salaries and wages as the main income (NSA, 2019). Exact figures do not exist, but this high percentage can be ascribed to the dominance of the mining, fishing and manufacturing and processing sectors together with the prominence of state departments and the administrative sectors. A total of 12.6% of households receive their income from business activities (NSA, 2019).

Average annual household consumption in urban households in Namibia was nearly double that of rural households: N$150,692 and N$81,742 respectively in 2017. In 2017 the Erongo Region ranked third highest in household consumption – urban and rural combined – at N$128,617 per annum, behind Khomas and Hardap Regions. Household income is predominantly spent on housing (38.6%), followed by food at (23.1%), which is the lowest proportion nationally. Poverty levels are the lowest in the country, in comparison with the other regions of the country, with only 4.4% of all households in the region being considered poor (Ashby, 2022, referenced in Namisun, 2023a).

5.6.3 ECONOMIC PROFILE

Although Namibia is classified as a high middle-income country, this status is somewhat deceptive owing primarily to Namibia's level of income inequality. Socio-economic inequalities inherited from pre-independence (34 years ago) remain extremely high and structural constraints to growth have hampered job creation. Economic advantage remains in the hands of a relatively small segment of the population and the large disparities of income have led to a dual economy – a highly developed modern sector co-existing with an informal subsistence-oriented one. The duality of the labour market, combined with slow job creation and low primary-sector productivity, results in very high unemployment (Ashby, 2022, referenced in Namisun, 2023a).

Namibia's economy grew between 2010 and 2015 by an average of 5.3% per annum, but then slumped into a recession with primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third quarters respectively (Ashby, 2022, referenced in Namisun, 2023a). In 2021 the domestic economy rebounded to a positive growth for the first time in two years, growing by 2.4% compared to a contraction of 7.9% recorded in 2020 during the height of COVID-19 pandemic. In 2022 an annual Gross Domestic Product (GDP) growth rate of 4.6% was recorded (www.nsa.org.na).

The Erongo Region has a well-developed infrastructure, is the second most prosperous region in Namibia and includes Namibia's largest coastal towns of Walvis Bay and Swakopmund. Mining, fishing, tourism, transportation, and storage comprise the principal economic activities in the Erongo Region. Mining is a pronounced industry in the Erongo Region, and the main commodities

are uranium, gold, salt and dimension stones. Fishing is another prominent economic sector in the Erongo Region, playing a significant role in terms of production, foreign exchange earnings and government revenue. The sector is a significant employer in Walvis Bay (Ashby, 2022, referenced in Namisun, 2023a).

Besides the prominence of the fishing industry, the world-class Port of Walvis Bay enjoys linkages with the rest of Namibia and its neighbours via the Trans-Kalahari and Trans-Caprivi Highways as a well as a railway, making the town a real logistics hub. Other key economic activities in which the port plays an important role include manufacturing, logistics, marine engineering, and storage (Namisun, 2023a).

5.6.4 HEALTH

Since independence in 1990, the health status of Namibia has increased steadily with a remarkable improvement in access to primary health facilities and medical infrastructure. Namibia has been on track to improve the health status of its citizens in recent years, with multiple health indicators showing positive trends (NSA, 2019).

In 2015 the World Health Organization (WHO) recommended strategic priorities of the health system in Namibia of which the combating of Human Immunodeficiency Virus / Acquired Immuno-Deficiency Syndrome (HIV/AIDS) and Tuberculosis (TB) were highlighted (WHO, 2016). Nationally, life expectancy at birth decreased from 61.6 in 1990 to 52.2 in 2000, due to the HIV/AIDS pandemic, but has since been improving to 63.4 in 2018. Life expectancy is slightly higher for women (65 years) than men (62 years) (Ashby, 2022, referenced in Namisun, 2023a).

Like elsewhere in Namibia, HIV/AIDS remains a major reason for low life expectancy and is one of the leading causes of death in the Erongo Region too. It remains the leading cause of death and premature mortality for all ages, killing up to half of all males and females aged 40 - 44 years in 2013 (IHME, 2016). HIV/AIDS does not only affect the quality of life of those infected, but also that of those having to care for them. TB is a leading killer of people infected by HIV/AIDS, and Namibia had a high burden in 2018, 35% of people notified with TB were infected with HIV. The country is included among the top 30 high-burden TB countries in the world, with an estimated incidence rate of 423 per 100,000 people and 60 fatalities per 100,000 people in 2018 (www.mhss.gov.na).

According to the website of the Ministry of Health and Social Services (MoHSS) the Erongo Region has a total of 18 primary health care facilities, two health centres, and four district hospitals – in Swakopmund, Walvis Bay, Omaruru and Usakos (www.mhss.gov.na). There are also private hospitals in Swakopmund and Walvis Bay and a private medical centre in Arandis.

In 2016 it was estimated that 12.6% of all people in the Erongo Region is younger than five years of age and 15.7% between five and fourteen years of age. Only 37.7% of children younger than five years of age in the region attended programs of early childhood development in 2016 (NSA, 2017), implying that access to these facilities and access to infant health care facilities is limited.

The largest percentage of people in the Erongo Region utilize hospitals for medical care (42.8%) and only 22.9% must rely on a clinic. 15.6% of the total population of the region receive their medical treatment from a doctor (NSA, 2017). The death rate of 9.9 deaths per 1000 people for the region was lower than the national average of 10.8% in 2016 (NSA, 2017).

5.6.5 SOCIO-ECONOMIC LINKS TO IMPACTS

Development of exploration- / mining-related projects may require a trade-off between the social, economic and biophysical components of the environment, both positive and negative. By addressing socio-economic issues, decision-makers can assess impacts across all the components of sustainable development, thus enabling an evaluation of whether a development is acceptable or not.

When one considers the socio-economic impact pathways in this context, the potential investment can result in employment and income generation, which are considerable positives on the one hand, but also deliver sizable negatives such as pressure on housing, health and educational facilities, on the other hand.

It is unlikely that Walvis Bay's continuous population growth will slow in the short and medium term, with prospects for an increase in mining activity and the oil and gas-industry, increased trade activities with the SADC region through the port, expanding manufacturing opportunities, and continuing rural-urban migration. At the same time, Swakopmund as the regional capital, a renowned tourism destination, resident town to many of the workers on mines nearby and popular retirement location will maintain a steady growth rate, benefitting from the economic spillovers from Walvis Bay too.

Although the presence of GIB Mining's proposed exploration activities can cumulatively contribute to the socio-economic make-up of the Erongo Region, its potential influence is comparatively small. To the contrary, the potential influence of GIB Mining's proposed exploration activities on tourism and conservation (in the Erongo Region) is more direct and discernible.

The tourism infrastructure of the northern part of the NNNP is well developed with several scenic and picknick spots, good roads and campsites. In addition, two important main roads cross the northern part of the NNNP – the C28 in the north and the C14 in the south (see Figure 1), which

make access to the destinations of the NNNP easy. This infrastructure is used by the many tourists that visit the tourism destinations of the Erongo Region – Swakopmund, Walvis Bay lagoon, Cape Cross, Sandwich Harbour, and so forth. The three campsites closest to EPL 9924 are at Bluttkuppe, Ganab and Tumas View (see also Figure 1). Of further relevance to the EPL is the location of the Hotsas Waterhole – located <1km from its boundary. No overnighting is allowed at the waterhole, but it is conveniently connected to park roads, which gives reason to expect daily visitors.

5.7 Land Use and Closest Sensitive Receptors

EPL 9924 is in the northern section of the NNNP, which is Namibia's largest conservation area, covering a total surface area of 49,768 km^2. The park stretches from the Khan River and Kuiseb River delta southwards along the coast to the B4 road between Aus and Lüderitz including the Namib Sand Sea and the Naukluft Mountains. The entire eastern border of the park is shared with commercial farms.

In the Park Management Plan for the NNNP (MEFT, 2021 p97) the Hotsas Waterhole is identified as a place of special value, surrounded by a concentric circle (buffer) in which minimal disturbance is recommended.

The northern section of the park – north of the Kuiseb River – covers large tracts of the gravel plains of the Namib Desert. This part of the park is marked with a considerable level of road, pipeline and powerline infrastructure development and accommodates two of Namibia's uranium mines – the Husab Mine of Swakop Uranium and the Langer Heinrich Mine of Paladin – as well as the Elspe Mine (gypsum). In addition, Deep Yellow was granted an ML for its Tumas Project while the exploration activities of the Koppies Project of Elevate are in an advanced stage. Various other exploration activities have been undertaken (and continue to) take place in this part of the park.

The main roads C28 (from Swakopmund) and the C14 (from Walvis Bay) cross the northern part from west to east. Both are linked with other national and park roads as well as some campsites in the park (see Figure 1). One of the major attractions to tourists visiting the NNNP is the scenic beauty of the park itself. This is predominantly based on the absence of human activities and structures in most parts of the NNNP, coupled to the sense of remoteness (Namisun 2023b).

The northern parts of the NNNP are less frequently visited, when compared to other popular tourist destinations of the park such as Sesriem. No exact figure for overnight visitors to Bluttkuppe, Ganab and Tumas View, or day visitors to the Hotsas and Gemsbokwater Waterholes exist. However, during 2018/19 more than 10,000 visitor permits by the booking offices of the

MEFT were issued (Namisun 2023b) – a figure that roughly indicates how popular the campsites of the northern NNNP are – albeit collectively. One may also assume that Hotsas Waterhole, as the only place of surface water to animals in a vast piece of land, is a popular stopover for day visitors – and in certain times might act as the only place to observe breeding lappet-faced vultures.

Personnel of the DWNP reside at Ganab, about 13 km southeast of EPL 9924. Except for the users of the C14, C28 and D1982 roads, the closest permanent residents are on the Ruimte Hunting Ranch about 25 km southeast of EPL 9924. Overnight visitors to Blutkuppe, Ganab or Tumas View – i.e. the permitted campsites of the NNNP – are >10 km from the EPL. However, day visitors to the viewpoint at the Hotsas Waterhole can be <1 km from EPL 9924.

The Hotsas Viewpoint – a parking lot and game hide – is about 400 m outside the northern boundary of EPL 9924. Blutkuppe Campsite is 15 km northwest of the northern boundary of EPL 9924 and Langer Heinrich Mine, also to the northwest, is 18 km away. Ganab Campsite is 15 km southeast from its southern boundary. A park road between the C28 main road and the D1982 road crosses the EPL from north to south.

6 ALTERNATIVES

This chapter describes the various alternatives that were considered as part of the planning of the proposed exploration activities.

6.1 TARGETS

The proposed exploration activities of GIB Mining in EPL 9924 and EPL 10131 are aiming at calcrete-hosted uranium deposits associated with paleo channels. The target in EPL 9924 is broad, shallow, thin, low grade uranium mineralisation which will require similar pattern drilling to what Elevate Uranium is doing just to the south. In EPL 10131 the target is expected to be deeper and potentially of a higher grade, if it exists.

The Hotsas Viewpoint is about 400 m from the northern boundary of EPL 9924 and the Hotsas Waterhole is even closer. Cognisant of its location and the potential sensitivity associated with the Hotsas Waterhole, exploration activities in EPL 9924 are planned according to time-spatial alternatives – considering stay-away areas and periods.

6.2 ACCESS ROUTES

As stated in Section 4.6, only existing access routes will be used for the proposed exploration activities. To both EPLs the main access is via the C28 and D1982 roads (see Figure 4).

Existing roads (and parking areas) will be used to park the vehicle and all exploration onsite will be done on foot during Phase 1.

During Phase 2, access tracks to the drill sites will be required. To avoid offroad driving and the creating of new unwanted tracks, access tracks will be minimized – also to save on rehabilitation costs afterwards. After completion of the drilling, the disturbed areas as well as the temporary access routes will be rehabilitated.

6.3 STAY-AWAY AREAS AND PERIODS

From stakeholders it was learnt that the vultures occurring at Hotsas reside in the vicinity of the waterhole for long periods of time – to pair, nest, hatch and raise their chicks. Against this scenario it is possible to identify the period during which breeding vultures will be absent and it would be possible to identify possible stay-away distances from active vulture nests. Accordingly, alternative times for some activities near the Hotsas Waterhole, and specific stay-away distances from the active nests will be incorporated into the workplans. Also, airborne activities must incorporate the timing of the flights, heights and direction of the flight paths. This assessment

took these considerations into account for suggesting alternatives in terms of distances and timing.

A specialist in archaeology was engaged to conduct a survey in both EPLs. In accordance with the findings from the archaeological survey, specific recommendations were made in terms of making sure that recorded sites are left undisturbed, that a buffer zone applies around a significant site and that a Chance Find Procedure is adopted for if unknown sites are found.

6.4 No-Go Option

This option entails that no exploration activities are undertaken and upon expiration EPL 9924 will revert to the MME. Should this happen, the economic and social growth associated with the potential resource will not reach fruition, and the Namibian economy will fail to benefit from a potential mineral resource. The advantage of this option would be that no exploration activities would take place in the NNNP and will not (potentially) negatively impact on the environment.

7 IDENTIFICATION AND DESCRIPTION OF POTENTIAL ENVIRONMENTAL IMPACTS

This chapter outlines the environmental aspects and potential impacts associated with the proposed exploration activities of GIB Mining in EPL 9924, as identified by the environmental team during the screening and scoping phases, in consultation with I&APs. It reasons potential key aspects and impacts, and qualitatively assess the potential impacts.

7.1 ASPECT AND IMPACT IDENTIFICATION

The criteria used to assess the impacts and the method of determining the significance of the impacts are outlined in Table 7, Table 8 and Table 9.

Table 10 contains the activities associated with the proposed exploration activities (as described in more details in Chapter 4), the associated environmental aspects and potential impacts and a qualitative assessment of the impacts (before and after mitigation).

The environmental aspects and potential impacts were identified during the scoping process, in consultation with I&APs and the environmental team. For context, the description of the potential impacts should be read with the corresponding descriptions of the current environment in Chapter 5 of this report.

This method complies with the Environmental Management Act, No. 7 of 2007 and its regulations. Table 7 provides the impact assessment criteria and the approach for determining impact consequence (combining nature and intensity, extent and duration) and impact significance (the overall rating of the impact). Impact consequence and significance are determined from Table 8 and Table 9 respectively. The interpretation of the impact significance is given in Table 9. Both mitigated and unmitigated scenarios are considered for each impact.

TABLE 7: IMPACT ASSESSMENT CRITERIA

IMPACT ASSESSMENT CRITERIA		
SIGNIFICANCE determination	**Significance = consequence x probability**	
CONSEQUENCE	**Consequence is a function of:** • **Nature and Intensity of the potential impact** • **Geographical extent should the impact occur** • **Duration of the impact**	
Ranking the NATURE and INTENSITY of the potential impact		
Negative impacts		
Low (L)	The impact has no / minor effect/deterioration on natural, cultural and social functions and processes. No measurable change. Recommended standard / level will not be violated. (Limited nuisance related complaints).	
Moderate (M)	Natural, cultural and social functions and processes can continue, but in a modified way. Moderate discomfort that can be measured. Recommended standard / level will occasionally be violated. Various third party complaints expected.	
High (H)	Natural, cultural or social functions and processes are altered in such a way that they temporarily or permanently cease. Substantial deterioration of the impacted environment. Widespread third party complaints expected.	
Very high (VH)	Substantial deterioration (death, illness or injury). Recommended standard / level will often be violated. Vigorous action expected by third parties.	
Positive impacts		
Low (L) +	Slight positive effect on natural, cultural and social functions and processes Minor improvement. No measurable change.	
Moderate (M) +	Natural, cultural and social functions and processes continue but in a noticeably enhanced way. Moderate improvement. Little positive reaction from third parties.	
High (H) +	Natural, cultural or social functions and processes are altered in such a way that the impacted environment is considerably enhanced /improved. Widespread, noticeable positive reaction from third parties.	
Very high (VH) +	Substantial improvement. Will be within or better than the recommended level. Favourable publicity from third parties.	
Ranking the EXTENT		
Low (L)	Local (confined to within the project concession area and its nearby surroundings).	
Moderate (M)	Regional (confined to the region, e.g. coast, basin, catchment, municipal region, district, etc.).	
High (H)	National (extends beyond district or regional boundaries with national implications).	
Very high (VH)	International (Impact extends beyond the national scale or may be transboundary).	
Ranking the DURATION		
Low (L)	Temporary/short term. Quickly reversible. (Less than the life of the project).	
Moderate (M)	Medium Term. Impact can be reversed over time. (Life of the project).	
High (H)	Long Term. Impact will only cease after the life of the project.	
Very high (VH)	Permanent	
Ranking the PROBABILITY		
Low (L)	Unlikely	
Moderate (M)	Possibly	
High (H)	Most likely	
Very high (VH)	Definitely	
SIGNIFICANCE Description		
	Positive	**Negative**
Low (L)	Supports the implementation of the project	No influence on the decision.
Moderate (M)	Supports the implementation of the project	It should have an influence on the decision and the impact will not be avoided unless it is mitigated.
High (H)	Supports the implementation of the project	It should influence the decision to not proceed with the project or require significant modification(s) of the project design/location, etc. (where relevant).
Very high (VH)	Supports the implementation of the project	It would influence the decision to not proceed with the project.

TABLE 8: DETERMINING THE CONSEQUENCE

DETERMINING THE CONSEQUENCE					
INTENSITY OF IMPACT = LOW					
DURATION	VH	Moderate	Moderate	High	High
	H	Moderate	Moderate	Moderate	Moderate
	M	Low	Low	Low	Moderate
	L	Low	Low	Low	Moderate
INTENSITY OF IMPACT = MODERATE					
DURATION	VH	Moderate	High	High	High
	H	Moderate	Moderate	High	High
	M	Moderate	Moderate	Moderate	Moderate
	L	Low	Moderate	Moderate	Moderate
INTENSITY OF IMPACT = HIGH					
DURATION	VH	High	High	Very High	Very high
	H	High	High	High	Very High
	M	Moderate	Moderate	High	High
	L	Moderate	Moderate	High	High
INTENSITY OF IMPACT = VERY HIGH					
DURATION	VH	Very high	Very High	Very High	Very high
	H	High	High	Very High	Very high
	M	High	High	High	Very High
	L	Moderate	High	High	Very High
		L	M	H	VH
		EXTENT			

TABLE 9: DETERMINING THE SIGNIFICANCE

DETERMINING THE SIGNIFICANCE					
PROBABILITY	VH	Moderate	High	High	Very high
	H	Moderate	Moderate	High	Very high
	M	Low	Moderate	High	High
	L	Low	Low	Moderate	High
		L	M	H	VH
		CONSEQUENCE			

TABLE 10: ENVIRONMENTAL ASPECTS AND POTENTIAL IMPACTS ASSOCIATED WITH ALL EXPLORATION ACTIVITIES PROPOSED IN EPL 9924

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
Geological studies, field mapping, rock and soil sampling											
Field mapping, ground radiometric survey and rock and soil sampling NOTE: Only one to two persons will conduct these activities which will be supervised / conducted by a geologist	Biodiversity	Potential impact on fauna and flora (general disturbance of vegetation) Broader ecological / systems impacts	No off-road driving will take place, access is only by foot, therefore no disturbance of natural vegetation is foreseen. In the unmitigated scenario, fauna could be disturbed and be prevented of visiting the waterhole (for a short period of time). Due to the very small-scale nature of activities, impacts on vegetation can be avoided.	Without	**M**	**L**	**L**	**L**	**M**	**L**	**1**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	Hotsas Waterhole and related drainage lines is a key site for vultures (pers. comms. P. Bridgeford, July 2024). Any disturbance during the nesting, breeding and juvenile phases could be detrimental, as they might abandon nests when regularly disturbed.	Without	**H**	**H**	**M**	**H**	**L-M**	**M-H**	**2**
				With	**L-M**	**L-M**	**L**	**L-M**	**L**	**L**	
	Heritage	Activities could result in possible damage to or destruction of heritage resources.	With reference to Section 5.5 all the archaeological sites found within EPL 9924 are of a low significance and low vulnerability rating. The one site near, but outside, EPL 9924, deserves more detailed documentation. Without mitigation the site can be disturbed / destroyed forever.	Without	**M**	**VH**	**M**	**H**	**L**	**M**	**3**
				With	**L**	**L**	**L**	**L**	**L**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
Airborne Surveys											
Airborne radiometric and electromagnetic surveys	Biodiversity	Potential impact on fauna (general disturbance) Broader ecological / systems impacts	In the unmitigated scenario, fauna could be disturbed and be prevented of visiting the waterhole (for a short period of time).	Without	**M**	**L**	**L**	**L**	**M**	**L**	**4**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	Hotsas Waterhole and the related drainage lines is a key site for lappet-faced vultures (pers. comms. P. Bridgeford, July 2024). Any disturbance during the nesting, breeding and juvenile phases could be detrimental, as they might abandon nests when regularly disturbed.	Without	**H**	**H**	**M**	**H**	**M-H**	**H**	**5**
				With	**L-M**	**L-M**	**L**	**L-M**	**L**	**L**	
Drilling and associated activities											
Drill site establishment: Access the drill site(s) (possibly creating new access tracks). Set-up drilling machine with drip trays and groundsheets.	Noise (nuisance to third parties)	Noise generated by the establishment of access tracks and drill site and the potential impacts on tourism. (Noise-related aspects are considered under the biodiversity section)	Refer to Section 5.7. Although noise may have an impact on day visitors at the Hotsas Waterhole, these nuisance impacts are temporary and for short durations.	Without	**M**	**L**	**L**	**L**	**M**	**L**	**6**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
	Biodiversity	Potential impacts on fauna and flora (general disturbance of	EPL 9924 consists of areas of high ecological sensitivity (see Section 5.4.4), specifically around the Hotsas Waterhole and related drainage lines.	Without	**M**	**L**	**L**	**L**	M-H	**L-M**	**7**
				With	**L**	**L**	**L**	**L**	**M**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
Establish temporary safety fencing around the drill site Set-up portable toilet and ablution facilities Set-up fuel and lubricants storage area		vegetation) and noise disturbance.	Activities are relatively small-scale and with a very limited vegetation cover the potential impacts on vegetation is limited. However, the various activities and the exploration team would generate noise and other disturbance which would cause localised impacts to fauna. This could include temporary displacement of animals or in a worst-case injuring / killing small animals (i.e. reptiles, rodents, etc.) in the unmitigated scenario.								
		Unsupervised drilling personnel can impact on the biodiversity through illegal collection of plant material or firewood, poaching (either direct or indirect by informing syndicates), road kills, off-road driving, etc.	Activities are proposed in a part of the NNNP where relatively larger numbers of game concentrate around waterholes, more so around the Hotsas Waterhole. Poaching in the northern part of the park is an existing problem. Further exposure because of the proposed activities increases the risk for further impacts significantly.	Without	**VH**	**H-VH**	**M**	**H-VH**	**M**	**H**	**8**
				With	**L-M**	**L-M**	**L**	**L-M**	**L-M**	**L-M**	
		Site clearance may allow for the establishment of weeds and invasive plants in the area.	Under the unmitigated scenario disturbed sites will be left unattended and unrehabilitated. Weeds and invasive plants may also establish under these conditions. Under the mitigated scenario, all disturbed areas will be rehabilitated at completion of activities, which will prevent the establishment of weeds and invasive plants too.	Without	**M**	**L**	**L**	**L**	**L**	**L**	**9**
				With	**L**	**L**	**L**	**L**	**L**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	See Impact Reference 5. Activities relating to the set-up and movements of the exploration team would generate noise and other nuisances which would cause disturbance to vultures during the nesting, breeding and juvenile phases. This can be detrimental, as they might abandon nests. Under the mitigated scenario the sensitive areas and time periods will be avoided.	Without	**H-VH**	**H**	**M**	**H**	**H-VH**	**H**	**10**
				With	**L-M**	**L-M**	**L**	**L-M**	**L-M**	**L-M**	
	Heritage	Exploration activities could result in possible damage to or destruction of heritage resources.	See Impact Reference 3.	Without	**M**	**VH**	**M**	**H**	**L**	**M**	**11**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
Drilling	Spillages of hydrocarbons, lubricants, or possible spills from portable toilet and ablution facilities	Soil pollution	Soil loss and contamination could have adverse ecological impact (see Section 5.2.4). However, the areas to be disturbed are very localized, of a small-scale, and impacts can be mitigated, and the disturbed areas can be rehabilitated.	Without	**L**	**L**	**L**	**L**	**L**	**L**	**12**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
		Surface water contamination	With reference to Sections 5.3, tributaries of the Tubas River are in EPL 9924. Significant hydrocarbon spills can end up in these dry drainage lines during rain events. Given the small area to be impacted per hole and large hydrocarbon spills being unlikely the potential for this impact is likely to be small.	Without	**M**	**M**	**M**	**M**	**L-M**	**L-M**	**13**
				With	**L**	**L**	**L**	**L**	**L**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
		Groundwater could become polluted due to pollutants entering aquifers via surface water infiltration.	Given the magnitude of the project, small areas to be affected per hole and large hydrocarbon spills being unlikely, this impact is likely to be low, if mitigated. Furthermore, contamination of the aquifer on which the Hotsas Waterhole depends, is unlikely as activities near Hotsas are discouraged, based on the findings in this assessment. See also Impact References to "biodiversity".	Without	**M**	**M**	**M**	**M**	**M**	**M**	**14**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
	Dust from access roads and tracks. Air pollution from exhaust fumes. Dust from drilling activities	Air quality deterioration. Increase in dust levels (nuisance and health impacts – to visitors, road users and tourists)	Refer to Section 5.7. Although dust and noise may have an impact on day visitors at the Hotsas Waterhole, these nuisance impacts are temporary and for short durations.	Without	**M**	**L**	**L-M**	**L-M**	**L-M**	**L-M**	**15**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
Operational disturbances (including noise, worker / vehicle / machinery movement)	Noise generation	Noise generated by the drill could disturb nearby residences (nuisance and health impacts – to visitors, road users and tourists)		Without	**M**	**L**	**L-M**	**L-M**	**L-M**	**L-M**	**16**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
	Biodiversity	Potential impact on fauna (general disturbance)	See Impact Reference 7.	Without	**M**	**M**	**L**	**L**	M-H	**L-M**	**17**
				With	**L**	**L**	**L**	**L**	**M**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
		Broader ecological / systems impacts	EPL 9924 consists of areas of high ecological sensitivity (see Section 5.4.4), specifically around the Hotsas Waterhole and related drainage lines. Activities are relatively localized and small-scale and the potential impact on vegetation is limited. However, the various activities associated with drilling would generate noise and other disturbance which would cause localised impacts to fauna. This could include temporary displacement of animals or in a worst-case injuring / killing small animals (i.e. reptiles, rodents, etc.) in the unmitigated scenario.								
		Potential impact on avifauna (i.e. lappet-faced vultures) (general disturbance)	See Impact References 5 and 10. Drilling and related activities generate noise and other disturbances. This can cause disturbance to vultures during the nesting, breeding and juvenile phases, which could be detrimental, as breeding pairs might abandon their nests.	Without	H-VH	H	M	H	H-VH	**H**	**18**
				With	L-M	L-M	L	L-M	L-M	**L-M**	
	Drill chips with potential radioactivity	Potential impacts on surface water, groundwater, soil, fauna, avifauna and third parties (visitors, road users and tourists)	See Impact References 12 – 15. Although possible, low levels of radioactivity are expected (only). The areas to be affected are very localized, of a small-scale, and impacts can be easily mitigated, and the disturbed areas can be rehabilitated.	Without	**M**	**L**	**L**	**M**	**M**	**L**	**19**
				With	**L**	**L**	**L**	**L**	**L**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
Relevant to all activities											
All exploration activities	Socio-economic and third-party safety (i.e. visitors, road users and tourists)	Inconvenience and safety impacts to visitors, road users and tourists	The exploration team will be allowed access into the NNNP, and there is an increased risk of criminal activities such as poaching and possible disturbance to tourists. The potential impacts are limited to the drilling phase though, and will be localized, small-scale and temporary.	Without	**H**	**L**	**L**	**M**	**M**	**M**	**20**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
	Waste Management	The dumping of general waste within the exploration area and drilling sites could prove hazardous to wildlife. This could also lead to general environmental degradation and visual impacts.	Waste generation is likely to be limited onsite, will be contained and will primarily be domestic waste. Waste will be removed daily and disposed of properly off-site. Adverse impacts are unlikely.	Without	**M**	**L**	**M**	**M**	**M**	**M**	**21**
				With	**L**	**L**	**L**	**L**	**L**	**L**	
	Social – provision of portable toilet and ablution facilities	Health and safety issues. Potential impacts on surface water, groundwater, soil, fauna, avifauna and third parties (visitors, road users and tourists)	Suitable toilet and ablution facilities will be provided for the exploration team and adverse impacts are unlikely.	Without	**L**	**L**	**L**	**L**	**M**	**L**	**22**
				With	**L**	**L**	**L**	**L**	**L**	**L**	

ACTIVITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	SIGNIFICANCE DISCUSSION	With and without mitigation	Nature and intensity	Duration	Extend	Consequence	Probability	Significance	Ref
Closure and rehabilitation of drill site											
Rehabilitate disturbed areas after completion of activities	Biodiversity	Return site to natural state. No overall impacts.	Disturbed areas will be rehabilitated after completion of the activities.	**N/A**							**23**

8 ENVIRONMENTAL IMPACT STATEMENT AND CONCLUSIONS

It is Namisun's opinion that the environmental aspects and potential impacts relating to the proposed exploration activities of GIB Mining in EPL 9924 in the NNNP, Erongo Region, have been successfully identified and assessed as part of this EIA Scoping (including impact assessment) process.

The proposed exploration activities, associated aspects and potential impacts and the assessment thereof (linked to the current / baseline environment), are described in this document, the Environmental Scoping (including impact assessment) Report.

Relevant management and mitigation measures have been provided to ensure significant environmental and social impacts are avoided / minimized and positive social impacts enhanced, where relevant. These measures are included in the accompanying EMP.

The following must however be noted, as described in Chapter 7 and Section 1.5:

- EPL 9924 encompasses areas of ecological sensitivity, specifically around the Hotsas Waterhole and along some of the drainage lines. In addition, the Park Management Plan for the NNNP (MEFT, 2021) identifies the Hotsas Waterhole as a place of special value, surrounded by a concentric circle (buffer) in which minimal disturbance is recommended (see also Section 3.4.3 and Section 5.7). Seeing that the target areas for exploration by GIB Mining is planned in the western part of EPL 9924, the commitments in the EMP must be implemented to avoid / minimize impacts in this sensitive area and GIB Mining must inform DWNP prior to their planned drilling and associated activities near the Hotsas Waterhole (i.e. the western part of the EPL).
- In consideration of the Park Management Plan of NNNP, careful consideration from GIB Mining as well as MEFT and MME is required in respect of any planned (future) mining activities near the Hotsas Waterhole. This means that even though MEFT might allow exploration activities in EPL 9924 (under the conditions set out in this EMP, etc.) it is Namisun's, opinion that an early and a more detailed Environmental Screening Study be initiated, if mining and related activities are proposed near Hotsas Waterhole.

It is recommended that, if the MEFT provides a positive decision on this application, they should include a condition to the clearance that GIB Mining must implement all commitments and adhere to the management and mitigation measures contained in the EMP, also taking the above comments into consideration regarding the need for an in-depth screening study for possible future mining activities in the relevant (sensitive) areas.

9 THE WAY FORWARD

The way forward is as follows:

- The (draft) Environmental Scoping (including impact assessment) Report and the accompanying EMP were distributed for comments by I&APs for review.
- After the public review process, the reports were finalized with due consideration of all comments received and submitted to the MME and MEFT, and electronic copies of all the relevant documents are uploaded onto the MEFT (DEA) online portal.
- MME and MEFT will review the final documents and provide a record of decision.

10 REFERENCES

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APPENDIX A – CURRICULUM VITAE

APPENDIX B – INFORMATION SHARING RECORD

APPENDIX C – MINUTES OF MEETINGS AND ISSUES AND RESPONSE REPORT

APPENDIX D – STAKEHOLDER DATABASE

APPENDIX E – ARCHAEOLOGICAL SPECIALIST REPORT