



**ELSPE MINING (PTY) LTD**

**ENVIRONMENTAL MANAGEMENT PLAN**

**Prepared for: ML 105 A–D in the Namib-Naukluft National Park**

**October 2023**

**EMP FOR ELSPE MINING - ML 105 A-D**

**CONTENTS**

**1 INTRODUCTION .....4**

1.1 PROJECT OVERVIEW .....4

1.2 BACKGROUND ON ENVIRONMENTAL COMPLIANCE .....9

1.3 AIM OF THIS DOCUMENT .....10

1.4 KEEPING THE EMP UP TO DATE.....10

1.5 OVERALL OBJECTIVES .....11

1.6 ROLES AND RESPONSIBILITIES .....11

1.6.1 ELSPE OWNER WITH ASSISTANCE FROM THE ELSPE ENVIRONMENTAL OFFICER.....11

1.6.2 MINING MANAGER .....12

1.7 MONITORING .....12

1.8 TRAINING AND AWARENESS:.....13

1.9 LEGAL REQUIREMENTS .....14

1.10 AUDITING .....14

1.10.1 INTERNAL AUDITS .....14

1.10.2 EXTERNAL AUDITS .....14

1.11 DETAILS OF THE PERSONS WHO COMPOSED THIS EMP .....14

**2 MANAGEMENT AND MITIGATION PLANS .....15**

2.1 ACTION PLANS TO ACHIEVE OBJECTIVES .....15

**3 REFERENCES .....23**

**List of Figures**

FIGURE 1: ML 105 A-D LOCATION (REF: GOOGLE EARTH) ..... 5

FIGURE 2: HISTORIC, CURRENT AND FUTURE MINING AREAS (INDICATIVE) WITHIN ML 105 A-D (REF: GOOGLE EARTH) ..... 8

**List of Tables**

TABLE 1: ENVIRONMENTAL MANAGEMENT AND MITIGATION MEASURES ..... 16

## ACRONYMS AND ABBREVIATIONS

Below a list of acronyms and abbreviations used in this report.

<b>Acronyms / Abbreviations</b>	<b>Definition</b>
DEA	Department of Environmental Affairs
EAP	Environmental Assessment Practitioner
EAPAN	Environmental Assessment Professionals Association of Namibia
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
m	metre
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
ML	Mining License
MME	Ministry of Mines and Energy
NNNP	Namib-Naukluft National Park

## EMP FOR ELSPE MINING - ML 105 A-D

### 1 INTRODUCTION

#### 1.1 PROJECT OVERVIEW

Elspe Mining (Pty) Ltd (Elspe Mining) holds Mining Licence (ML) 105 A-D, located in the Namib-Naukluft National Park (NNNP), Erongo Region. The Ministry of Mines and Energy (MME) issued the original ML (in the name of Mrs IEEI Kahl) in 2001, which was valid until 2019. In June 2020, MME issued a renewal of the ML to Mrs Kahl, which is valid for another 10 years. The ML was transferred from Mrs Kahl to Elspe Mining.

ML 105 A-D is located  $\pm$  50 km southeast of Swakopmund (see Figure 1 for the location of the tenement). ML 105 A-D covers an area of approximately 978 hectares (ha), as follows:

- ML 105 A: ~6 ha
- ML 105 B: ~44 ha
- ML 105 C: ~506 ha
- ML 105 D: ~422 ha

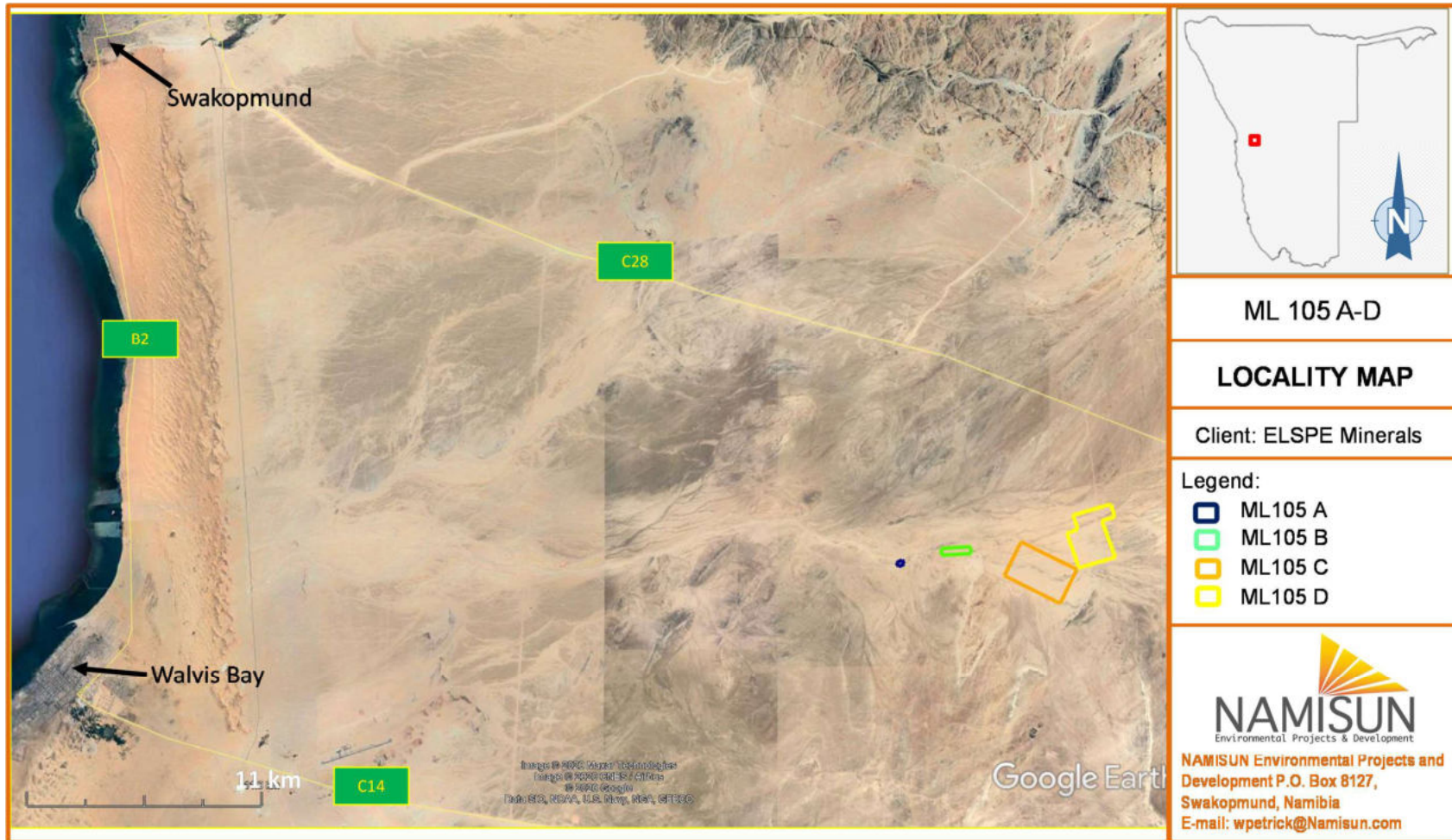


FIGURE 1: ML 105 A-D LOCATION (REF: GOOGLE EARTH)

Gypsum mining (and associated activities) was conducted on the tenement since 1959. The mining activities entail:

- The removal and stockpiling of topsoil.
- Removal and stockpiling of gypsum-containing material to a depth of 1.5 – 2.5 m.
- Screening, bagging and loading of gypsum.

Progressive rehabilitation is practiced on the tenement – once the gypsum-containing material is removed in a certain area, the mined-out part is flattened and covered with the (limited) stockpiled topsoil to allow natural revegetation on the landscaped area.

Gypsum occurs in relatively small concentrations across the tenement. Approximately 50 ha have historically been mined, which covers roughly 5 % of the tenement. Various techniques have been used / tested for the mining of gypsum over the years. These include hydraulic hammers and jack hammers to break the gypsum; as well as drilling and blasting techniques. Since December 2019, a “continuous miner” has been introduced to mine the gypsum material and a 2<sup>nd</sup> “continuous miner” was introduced in May 2021. This mining method is an improvement when compared to other methods previously implemented, not only relating to the efficiencies, (i.e. production) but also in terms of dust generation. It also implies that no blasting is necessary.

Onsite facilities include offices, elevated water tanks and worker quarters, a change room and ablution facilities, a warehouse, a weighbridge, a bulk fuel storage and refilling facility, and a borehole and accompanying infrastructure for water abstraction. The ablution facilities are connected to a French drain system for the handling and containment of sewage while a mobile toilet(s) are used in the active mining area. Wastewater from the mobile toilets is contained and removed for disposal at a permitted facility offsite.

Mobile equipment consists of 2 x front-end loaders; 1 x grader; 1 x fuel bowser; 2 x continuous miners; 1 x compressor; 1 x diesel generator; 1 x small truck; 2 x pick-up vehicles and 1 x hopper conveyor system.

Electricity at the offices and warehouse is provided by (photovoltaic) PV solar power. The PV panels are mounted on the roof of the warehouse and the inverters, charge controllers and batteries housed inside the warehouse. A back-up diesel generator is also used onsite. Abstraction of water at the onsite borehole is also done with PV solar power.

Potable water is brought from Swakopmund – for domestic use – while water from the onsite borehole is abstracted for non-domestic use, such as dust suppressing.

General waste is collected and placed in wheelie bins onsite. Because of the small quantities of this type of waste, no segregation takes place. When full, the content of the wheelie bins is taken

offsite for disposal at the dump of the Swakopmund Municipality. A laydown area for scrap metal, redundant equipment and spare parts is situated adjacent to the active mining area onsite. Small quantities of waste oil are generated onsite. This waste oil is collected and stored in a container in the warehouse. When full, the waste oil container will be removed to be emptied at an appropriate facility offsite. Hazardous waste entails contaminated soil; this type of waste is placed in bags and taken for disposal at a permitted facility offsite.

Elspe Mining employs 6 permanent people, of which 2 are working from their Swakopmund office and 4 on site. Erongo Plant Hire (i.e. contractor) employs 15 people, all on site. 3 of the people employed by the contractors are permanent employees and the remaining 12 are on a contract basis. To security people stay (i.e. sleep) on site, while all other people are transported to the mine site daily.

Elspe Mining makes use of two transport companies to dispatch the gypsum. The screening, bagging and loading of the gypsum on the mine is done onsite by the contractor.

It is not envisaged that any additional facilities will be constructed in the foreseeable future. Elspe plans to carry on with similar mining and associated activities and no extensive extension is planned. The current and future footprint will therefore largely be restricted to the already disturbed, active mining area. Mining activities are currently being undertaken in the western part of ML 105 C. The overall size of the current area being mined is  $\pm 18$  ha, (see Figure 2). Elspe started mining in this area in 2016 and will continue to mine here for another  $\sim 5$  years.

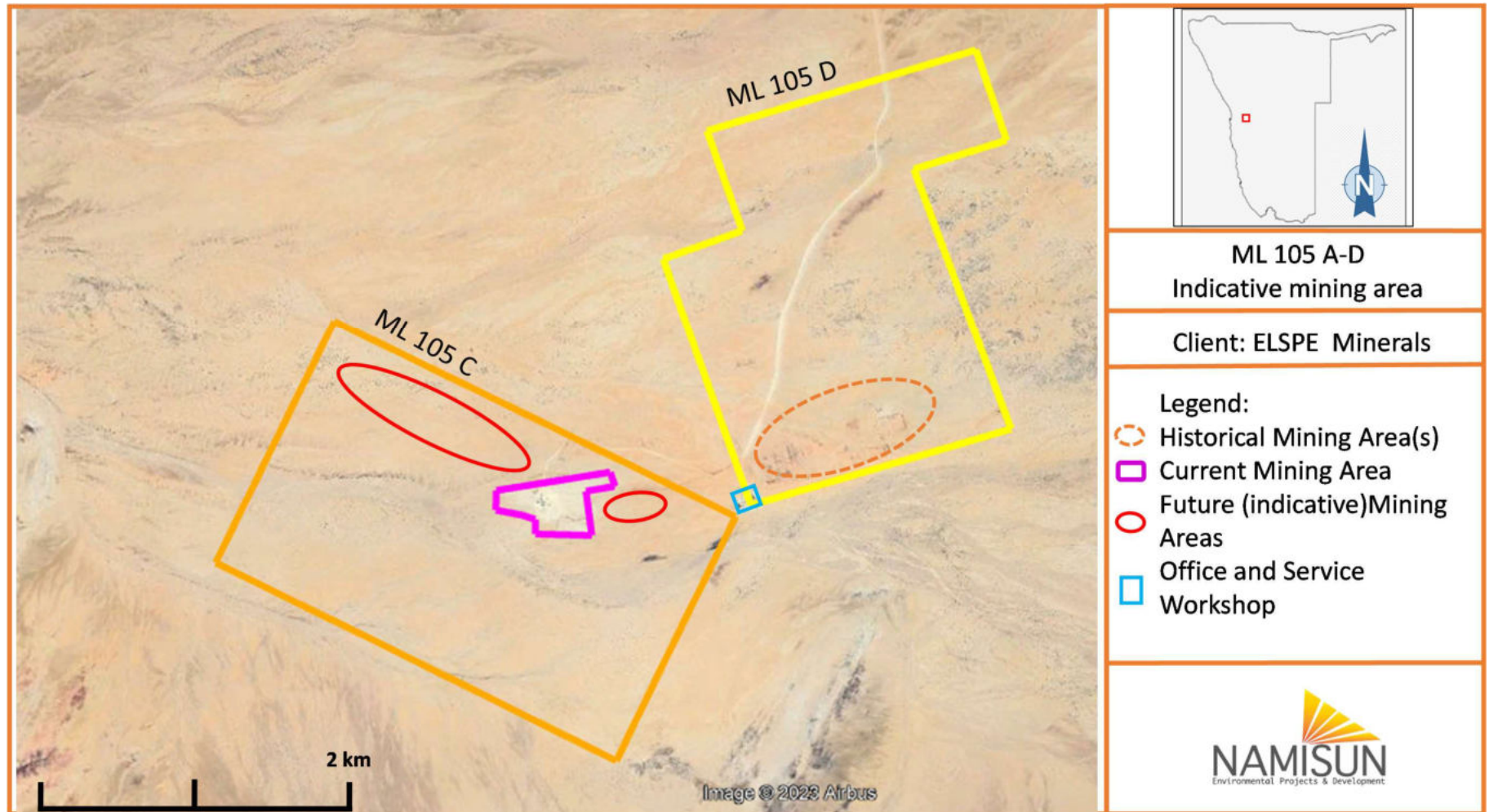


FIGURE 2: HISTORIC, CURRENT AND FUTURE MINING AREAS (INDICATIVE) WITHIN ML 105 A-D (REF: GOOGLE EARTH)



## 1.2 BACKGROUND ON ENVIRONMENTAL COMPLIANCE

In September 2008 EnviroSolutions prepared an “Environmental Impact Assessment (EIA) report for the mining of gypsum on Concessions ML-105A, ML-105B, ML-105C, & ML-105D in the Namib-Naukluft Park”. Subsequently, EnviroSolutions prepared an “Update of the EIA for the mining of gypsum on Concessions ML-105A, ML-105B, ML-105C, & ML-105D in the Namib-Naukluft Park” in November 2013, which included a short, tabularised Environmental Management Plan (EMP) as an appendix.

An Environmental Clearance Certificate (ECC) was issued on the 18<sup>th</sup> of January 2018, based on an approved EIA Report and EMP. This ECC, in the name of Elspe Minerals (Pty) Ltd, which was valid until 18 January 2021.

Since the ML was issued by MME in the name of Mrs Kahl, Elspe Minerals (Pty) Ltd requested the Ministry of Environment, Forestry and Tourism (MEFT) to re-issue the ECC in the same name. Therefore, MEFT issued a new ECC for the mining operations on ML 105 A-D in the name of Mrs IEEI Kahl on the 17<sup>th</sup> of August 2020. The re-issued ECC was valid until 17 August 2023.

In February 2021, Elspe Minerals (Pty) Ltd applied to MME for a name change from Mrs IEEI Kahl to Elspe Mining (Pty) Ltd for the MLs. MME issued the revised MLs to Elspe Minerals (Pty) Ltd on 27 April 2021, which are valid until 14 June 2030.

Namisun Environmental Projects and Development (Namisun) was appointed by Elspe Mining to conduct a site visit to the mining area on the 14<sup>th</sup> of August 2020, and to conduct and audit against the approved EMP and compile an “Environmental Performance Report”. However, the 2020 report was never finalized due to a lack of information because of restructuring at the company.

In March 2022 another environmental compliance audit (against the approved EMP) was conducted by Namisun, which included a site visit. The drafted 2020 report forms the basis of the subsequent “Environmental Performance Report” of 2022.

As part of the application process for the renewal of the ECC, Namisun was appointed by Elspe in September 2023 to conduct another environmental compliance audit against the approved EMP commitments and to compose an “Environmental Performance Report”. The audit related to Elspe’s current mining and associated activities on ML 105 A-D for submission to the authorities – the Directorate of Environmental Affairs at the MEFT. In addition to this task, Namisun was appointed to administer the application process for the renewal of the ECC.

As part of this process a name change to Elspe Mining on the ECC is necessary to ensure that the ECC is aligned with the holder of ML 105 A-D.

### **1.3 AIM OF THIS DOCUMENT**

The original EMP was attached to the “Update of the Environmental Impact Assessment for the mining of gypsum on Concessions ML-105A, ML-105B, ML-105C, & ML-105D in the Namib-Naukluft Park” in November 2013 (EnviroSolutions, 2013), as a cryptic, tabularised appendix. As a result, the approved EMP remains unarticulated and unobtrusive. Elspe Mining therefore requested Namisun – as part of the assignment to administer the application process for the renewal of the ECC – to make the EMP a more elaborative, stand-alone document (this document).

It needs to be emphasised that Namisun did not conduct an EIA of the current activities at ML 105 A-D. The reconstructed EMP, this document, incorporates the original EMP commitments of 2013, considered the outcomes of the audits conducted by Namisun and includes generic content which forms part of a standard EMP.

The aim of this EMP (i.e. this this document) is thus to detail the actions required to effectively implement management and mitigation measures required to minimise negative environmental impacts and to enhance positive impacts associated with the mining activities on ML 105 A-D, in general. The EMP also gives the standard environmental commitments, which must be implemented on ML 105 A-D by Elspe Mining.

### **1.4 KEEPING THE EMP UP TO DATE**

It is the intention that this EMP should be seen as a “living document” which will be amended during the operation (where relevant) as new information (e.g.: environmental data), policies, authority guidelines, technologies and as the activities might change, or new ones be introduced.

Elspe Mining will conduct periodic reviews of the EMP, should circumstances change.

Should any listed activity(s) as defined in the EIA-regulations associated with the Environmental Management Act, No. 7 of 2007 be triggered because of future modifications / changes or should extensions of the current footprint of the mining activities on ML 105A-D be made, this EMP will be required to be updated through another EIA process as stipulated in the Act and its regulations. See also Section 1.3.

With reference to section 1.4, any future (significante) increase in ‘new mining areas’ would require a revised assessment of impacts (this could trigger the need for an amendment application or be conducted in parallel with the next renewal application process -depending on the future mine plan). Key environmental aspects / potential impacts need to be further identified and re-assessed. A better defined mine plan will also assist with this planning.

## 1.5 OVERALL OBJECTIVES

The following overall environmental objectives have been set for the mining activities associated with ML 105 A-D, to be implemented by Elspe Mining:

- Ensure compliance to this EMP and other relevant conditions or approvals and all national legislation and standards for the protection of the environment.
- Adherence to the Park Rules is non-negotiable.
- Consider the new NNNP Park Management Plan, where relevant.
- Keep key stakeholders informed about Elspe Mining's activities, where relevant.
- Promote ongoing environmental awareness.
- Apply the precautionary principle throughout by enforcing responsibility – by supporting and training of all employees and service providers to ensure that all the employees and contractors adhere to the relevant management commitments.
- Incorporate the relevant requirements stipulated in this EMP into the designs and contracts as well as work instructions, procedures, and other relevant documents.
- Without infringing on the rights of workers, manage their movements and set rules for behaviour, with special emphasis placed on preventing transgression and punishment of transgressors.
- Pollution will be prevented through basic infrastructure design and through maintenance of equipment.
- Clean up in case of incidents, through appropriate measures.
- Ensure the legal and appropriate management and disposal of general and hazardous waste, through the implementation of a strategy for the minimisation, recycling (where possible), management, temporary storage and removal of waste.
- Develop, implement and manage monitoring systems as required to ensure good environmental performance and reporting.
- In the case of incidents, the Site Manager should be informed, and the necessary action taken (including the reporting of incidents to the implied authorities).

## 1.6 ROLES AND RESPONSIBILITIES

This section describes the roles and responsibilities for implementing the EMP.

### 1.6.1 ELSPE OWNER WITH ASSISTANCE FROM THE ELSPE ENVIRONMENTAL OFFICER

The Elspe Owner shall ensure compliance to this EMP. Compliance with the EMP will be part of the employees' work contracts and form part of the conditions for contractors' agreements. All contractors, sub-contractors and their employees will be contractually required to comply with the relevant commitments in this EMP. The Elspe Owner must ensure that contractors adhere to the

conditions of the EMP and other relevant permits. Contract documents should consider the inclusion of penalties for non-conformance to the EMP, or to link the sign-off of the contract to a retainer clause.

It is the duty of the Elspe Owner to ensure that appropriate environmental risk assessments are conducted and that an environmental risk management plan is developed and implemented. The Elspe Owner must ensure that an adequate protection and indemnity insurance cover for incidents exists, an Emergency Response Plan (including firefighting and oil spill contingency) is developed and implemented, and the necessary procedures and protocols required for emergencies are developed and implemented. The General Manager shall also ensure that sufficient financial and human resources are available to implement emergency procedures and take corrective action pro-actively when environmental risks are evident in advance.

The Environmental Officer will assist the General Manager to ensure compliance with the EMP on site. The Environmental Officer shall be responsible for responding to any actual environmental emergencies / incidences that occur, as specified in procedures and protocols. The Environmental Officer will be responsible for the following aspects related to compliance of this EMP:

- Regular inspections and auditing compliance to this EMP and any other relevant legal requirements e.g., permits and authorisations.
- Ensure that environmental awareness training is conducted during induction training and on an ad hoc basis thereafter.
- Ensure compliance to this EMP and permits and authorisations issued to Elspe Mining by relevant authorities.
- Submit required information to relevant authorities such as reporting on compliance with the EMP, permit and relevant authorisations.
- Develop and implement a Waste Management Strategy to ensure that waste is minimized, segregated, recycled, collected, handled and stored, removed and disposed of correctly.

#### **1.6.2 MINING MANAGER**

The Mining Manager must ensure compliance to the EMP commitments.

#### **1.7 MONITORING**

An inspection program shall be established to check that standards and procedures as contained in the EMP are implemented and complied with.

Incidents and non-conformances shall be recorded and addressed with appropriate corrective action.

A reporting system shall be maintained to ensure that all applicable statutory requirements are met. Monitoring reports shall be submitted to the authorities, as and when required.

Reporting of incidents and non-conformances shall include details such as the reason for incidents and non-conformance, responsible persons, consequences, the corrective action taken and the necessary follow-up activities. Incidents and non-conformances shall be reported to the General Manager. The cause of incidents and non-conformances shall be investigated, and recommendations formulated to prevent recurrence.

Monitoring requirements include, but are not limited to:

General monitoring:

- Conduct audits and inspections. All non-compliances should be recorded and discussed at weekly site meetings and timeous remedial actions taken.
- Check for non-compliances (lack of good housekeeping, spills and leaks, incorrect storage of substances, etc.) during a general site-wide inspection weekly.
- Monitor the site daily. Record all non-compliances, grievances and transgressions and initiate corrective measures.
- Constant monitoring and record keeping of clean-ups until the tasks are completed, approved and signed off by the General Manager.
- Implement further monitoring requirements stipulated in the action plans in section 2.1.
- Monitor the volumes of water abstracted and keep record of this.

Waste Management:

- Monitor whether the provisions set out in this EMP concerning waste management is being applied as per instructions.
- Keep safe disposal certificates.

### **1.8 TRAINING AND AWARENESS:**

The Environmental Officer must request attendance registers to be completed by all personnel attending induction training sessions.

Implement further environmental training and awareness requirements stipulated in the action plans in section 2.1

## **1.9 LEGAL REQUIREMENTS**

It is the responsibility of Elspe Mining to comply with all applicable legal requirements. Subsequently all implied permits, licenses and certificates must be in place. Amongst others, this entails that the abstraction borehole must be registered with the Directorate of Water Resources Management at the Ministry of Agriculture, Water and Land Reform (MAWLR), that a wastewater discharge permit (also from the MAWLR) is in place, that all permissions related to operations in a national park are in place, and that all legal requirements of the MME and the MEFT are met.

### **1.10 AUDITING**

Auditing against the commitments in the EMP is compulsory. A distinction between internal and external audits can be made.

#### **1.10.1 INTERNAL AUDITS**

The Elspe Environmental Officer will conduct internal management audits. These audits will be conducted periodically. The audit findings will be documented for both record keeping purposes and for informing continual improvement.

The Environmental Officer will conduct weekly site-wide inspections and daily when necessary.

#### **1.10.2 EXTERNAL AUDITS**

External environmental performance assessments, or external audits, are conducted annually by an independent qualified Environmental Practitioner.

### **1.11 DETAILS OF THE PERSONS WHO COMPOSED THIS EMP**

Namisun (a Namibia-based, independent environmental consultancy firm) was appointed by Elspe Mining to compose an EMP as a stand-alone document, incorporating the content of the original (approved) EMP of 2013.

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

Werner Petrick, the reviewer, has more than twenty-four years of relevant experience in conducting / managing EIAs, compiling EMPs and implementing EMPs and Environmental Management Systems (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).

## **2 MANAGEMENT AND MITIGATION PLANS**

The management and mitigation measures proposed to avoid, minimise, or mitigate the potential impacts are detailed in the action plans below.

### **2.1 ACTION PLANS TO ACHIEVE OBJECTIVES**

Action plans to achieve the objectives are listed in tabular format together, separated by activities. The action plans also include the frequency for implementing the mitigation measures as well as identifying the responsible party.

**TABLE 1: ENVIRONMENTAL MANAGEMENT AND MITIGATION MEASURES**

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
Mining areas, active and under rehabilitation	Injury / fatality to animals falling/trapped in the pit	<ul style="list-style-type: none"> <li>• Monitoring requirement:                             <ul style="list-style-type: none"> <li>○ Visually inspect the areas regularly to ensure no animals are trapped, strangled, injured or dead.</li> </ul> </li> <li>• Rescue all animals trapped, strangled or injured.</li> </ul>	Daily	Environmental Officer / Mining Manager
Ongoing mining operations	General disturbance and physical destruction of biodiversity	<ul style="list-style-type: none"> <li>• As part of an EIA necessitated by extensions of the current footprint (see Sections 1.3 and 1.4) a biodiversity specialist study must be conducted prior to any extensions.</li> <li>• Keep disturbance to a minimum and carefully plan the active areas.</li> <li>• Minimize the creation of new access tracks and use existing tracks only.</li> <li>• Elspe Mining will implement a zero-tolerance policy with regards to the killing of any animals or collecting of any vegetation.</li> <li>• No open fires will be permitted onsite.</li> <li>• Where relevant - keep topsoil separate, to be used for rehabilitation of mined-out areas.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
	Damage to archaeological sites	<ul style="list-style-type: none"> <li>• As part of an EIA necessitated by extensions of the current footprint (see Sections 1.3 and 1.4) an archaeological specialist study must be conducted prior to any extensions.</li> <li>• In the unlikely event that archaeological resources are discovered, a chance find emergency procedure will be implemented which includes the following:                             <ul style="list-style-type: none"> <li>○ All work at the find will be stopped to prevent damage.</li> </ul> </li> </ul>	Once off  Ongoing	General Manager  Environmental Officer / Mining Manager



ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
		<ul style="list-style-type: none"> <li>○ An appropriate heritage specialist will be appointed to assess the find and related impacts.</li> <li>○ Where relevant, permitting applications will be made to the necessary authorities, if required.</li> <li>● In the unlikely event that any graves are discovered during the mining activities, these will be avoided and preserved as a first priority. If damage is unavoidable, prior to damaging or destroying any identified graves, permission for the exhumation and relocation of graves must be obtained from the relevant descendants (if known) and the relevant local and provincial authorities.</li> </ul>		
	Surface water flow and contamination	<ul style="list-style-type: none"> <li>● Avoid activities in draining lines (as far as possible).</li> <li>● No mining in significant drainage lines.</li> <li>● Avoid activities near drainage lines that could cause spillage (i.e. contamination).</li> <li>● Refer to management measures for “Handling and storage of hydrocarbons and potential spillages” below.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
	Further assessments and approvals	<ul style="list-style-type: none"> <li>● With reference to Sections 1.3 and 1.4, revised assessment of impacts (i.e. updated EIA) required prior to any future (significate) increase in ‘new mining areas’.</li> <li>● Consult with MEFT (DEA) as this would likely trigger the need for an amendment application or be conducted in parallel with the next renewal application process -depending on the future mine plan).</li> </ul>	Prior to any future (significate) increase in ‘new mining areas’	General Manager

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
		<ul style="list-style-type: none"> <li>• Key environmental aspects / potential impacts need to be further identified and re-assessed.</li> <li>• Develop a better defined mine plan.</li> </ul>		
	Noise and vibrations (nuisance).	<ul style="list-style-type: none"> <li>• Restrict work to daylight hours.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
	Dust (nuisance).	<ul style="list-style-type: none"> <li>• Vehicle speeds will be limited to 40 km/h on access routes to limit dust.</li> </ul>	Ongoing	All
Work areas, including the warehouse	Handling and storage of hydrocarbons and potential spillages - Contamination of surface water and groundwater resources and pollution of soil.	<ul style="list-style-type: none"> <li>• Store hazardous material in a designated area.</li> <li>• Bunded areas will be designed to contain 110% of the volume stored. Ensure that the area is bunded, i.e. no material should enter the ground.</li> <li>• Use a drip tray to contain spillages when refilling machinery outside bunded areas.</li> <li>• Train staff working with hazardous material to avoid spillages.</li> <li>• Have emergency procedure in place, e.g. neutralising spilled hazardous material.</li> <li>• All refuelling and any maintenance of vehicles will take place on impermeable surfaces.</li> <li>• Pollution will be prevented through maintenance of equipment.</li> <li>• Spill kits will be readily available on site. Employees and contractors will be shown how to use the spill kits to enable containment and remediation of pollution incidents.</li> <li>• Any spills will be contained and cleaned up immediately.</li> <li>• Monitoring requirement:</li> </ul>	Ongoing	Environmental Officer / Mining Manager

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
		<ul style="list-style-type: none"> <li>○ Visually inspect the storage areas for possible leaks.</li> </ul>		
	Safety and security of third parties	<ul style="list-style-type: none"> <li>● Warning signs will be erected and maintained at the entrance to the Mine (at the C28 road).</li> <li>● Manage access to the site.</li> <li>● Any persons entering the mine area will be required to undergo a formal induction.</li> <li>● Unannounced (without an appointment and/or invitation) visitors will be denied access.</li> <li>● Operate an alcohol and drug free site and include random testing of all people on entry to site, at the beginning of shifts and at any time on duty.</li> </ul>	Ongoing	Environmental Officer / Mining Manager / Security personnel
Waste management	Emissions to land, impact on biodiversity, environmental degradation and nuisance impacts	<ul style="list-style-type: none"> <li>● Minimise waste as far as practicable.</li> <li>● Separate waste in designated receptacles. Receptacles will be marked for different kinds of waste. Liaise with Waste Recycling Companies to confirm most feasible recycling practices.</li> <li>● Non-hazardous waste to be disposed of at nearest registered landfill site.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
	Waste being blown away by wind causing emissions to land, impact on biodiversity, environmental degradation and nuisance impacts.	<ul style="list-style-type: none"> <li>● Hazardous waste must be disposed of at a registered hazardous waste disposal facility offsite.</li> <li>● Safe disposal certificates must be obtained and kept on record where relevant.</li> <li>● Suitable (windproof) receptacles (with a lid) for waste disposal will be provided at appropriate locations on site.</li> </ul>	Daily	Environmental Officer / Mining Manager & General Manager
	Animals (wildlife) attracted to waste	<ul style="list-style-type: none"> <li>● No littering and windblown litter must be picked up and removed daily.</li> </ul>		

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
Sewage management	causing their death / injury	<ul style="list-style-type: none"> <li>Wastewater from the mobile toilets to be contained and removed for disposal at a permitted facility offsite. Obtain safe disposal certificates.</li> <li>Monitoring requirement:                             <ul style="list-style-type: none"> <li>Visually inspect for any windblown waste</li> </ul> </li> </ul>		
	Wastewater	<ul style="list-style-type: none"> <li>Sewage and effluent may not be discharged onsite without permission from the authorities – the content must be contained for discharge offsite until permission is obtained from MAWLR.</li> <li>The necessary wastewater discharge permit must therefore be in place and the conditions / requirements on the permit / license (including monitoring) must be met.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
	Hygiene	<ul style="list-style-type: none"> <li>Sanitary systems must be constructed and located in such a way as to prevent a causation of any nuisance or unhygienic or offensive conditions.</li> <li>A portable toilet must be placed at the mining area and regularly maintained.</li> </ul>	ongoing	Environmental Officer / Mining Manager
Access roads	Third party safety Impact on biodiversity (fauna)	<ul style="list-style-type: none"> <li>A large section of the route is a public road and the proponent has limited control over this section of the route. The proponent should however ensure vehicles are not overloaded and the laws regarding driving and the use of vehicles on public roads are adhered to.</li> <li>Ensure the access track is kept in a good condition.</li> <li>Vehicle speeds will be limited to 40 km/h on access routes to limit dust.</li> <li>Conduct spot checks of truck drivers' Drivers Licenses (and keep a record of these).</li> </ul>	Ongoing	Transport Companies Environmental Officer / Mining Manager

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
		<ul style="list-style-type: none"> <li>• Make transport companies (and truck drivers) aware of speed limits on site.</li> <li>• Consider to conduct spot checks for speeding on site access road and haul roads and implement a penalty system for drivers not adhering to speed limits.</li> </ul>		
Workers onsite	Noise, community health / safety and security (access roads), poaching, etc.	<ul style="list-style-type: none"> <li>• Honour Park Rules.</li> <li>• Elspe Mining will implement a zero-tolerance policy with regards to the killing of any animals or collecting of any vegetation.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
General	Relevant to all	<ul style="list-style-type: none"> <li>• Provide relevant environmental awareness and training to personnel regarding the content of this EMP.</li> </ul>	Ongoing	Environmental Officer / Mining Manager
Mine Closure	Closure Planning	<ul style="list-style-type: none"> <li>• Develop a detailed Mine Closure Plan</li> <li>• In broad terms the main objective is that all mining-related infrastructure and equipment are removed and what remains must be rehabilitated to resemble the pre-project state of the land as closely as possible.                             <ul style="list-style-type: none"> <li>○ Disturbed areas will be returned to as close to the natural habitat as practicable.</li> <li>○ All mining-related structures, equipment and infrastructure will be demolished and removed from site.</li> <li>○ Hydrocarbon-contaminated soil will be excavated for disposal at a hazardous waste disposal facility or for bioremediation at a designated area</li> </ul> </li> </ul>	Ongoing	General Manager

ACTIVITY	ENVIRONMENTAL ISSUE	MANAGEMENT AND MITIGATION MEASURES	ACTION PLAN	
			FREQUENCY	RESPONSIBLE PARTIES
		<ul style="list-style-type: none"> <li>○ The ecological function of the land will be restored as far as possible by passive revegetation.</li> <li>○ Socio-economic impacts (including the loss of employment) will be minimised through careful planning and preparation for closure beginning one year before closure takes place.</li> </ul>		

### 3 REFERENCES

**EnviroSolutions, 2008.** Environmental Impact Assessment for the Mining of Gypsum on Concessions ML-105A, ML-105B, ML-105C, & ML-105D in the Namib Naukluft Park” report in September 2008.

**EnviroSolutions, 2013.** Update of the Environmental Impact Assessment for the mining of gypsum on Concessions ML-105A, ML-105B, ML-105C & ML-105D in the Namib-Naukluft Park. Unpublished report submitted to the authorities.

**Namisun, 2023.** Environmental Performance Report for the mining activities on ML 105 A-D in the Namib-Naukluft National Park. Unpublished report submitted to the authorities.