

Environmental Audit Report for the Renewal of Mining License (ML) No. 91 on Mansfield Farm 66 near Usakos in the Karibib District, Erongo Region.

ECC Number:

EDS Project Number: PNEA2018-03

Author(s): Ms. Rose Mtuleni Client: Manger Mining (Pty) Ltd

Reviewer: Mr. Nerson Tjelos Contact person: J Brunner

Company: Excel Dynamic Solutions | Telephone: +264 (0) 61 223 396/ 081 128 3234

(Pty) Ltd Postal Address: P.O Box 3013, Windhoek, Namibia

Telephone: +264 (0) 61 259 530 Email:

Fax2email: +264 (0) 886 560 836 pangolin@iafrica.com.na/jadenamibia@gmail.com

Email: info@edsnamibia.com

March 2022

TABLE OF CONTENTS

LIST OF	FIGURES	ii
LIST OF	TABLES	ii
1 INTR	RODUCTION	3
1.1	Project Background	3
1.2	Purpose of the Environmental Compliance (Audit) Report	5
1.3	Appointed Environmental Assessment Practitioner	6
1.4	Environmental Auditing	6
1.5	Details of the Project Proponent	6
2 EMP	ROLES AND RESPONSIBILITIES	7
2.1 l	Environmental Management Plan Actions and Audit	7
2.2 K	Key Potential Environmental Impacts to be managed	7
2.3 I	Phase 1: Operation (and Maintenance) Phase Management Action Plans	8
2.4	Phase 2: Monitoring Phase Management Action Plans	17
3 CON	ICLUSION AND RECOMMENDATIONS	24
LIST O	F FIGURES	
Figure 3: Figure 4:	Location of the mining license 91 near Usakos, Karibib District, Erongo Region. A waste container at a waste collection site on the mine	27 fined. fined.
LIST O	F TABLES	
Table 1: Table 2: Table 3: Table 4:	Proponent contact details and purpose of the ECC	7 udit 8

1 INTRODUCTION

1.1 Project Background

This bi-annual audit report is prepared on behalf of Manger Mining (Pty) Ltd (hereinafter referred to as *The Proponent*), who has been extracting tourmaline specimens on mining license 91 (ML 91) near Usakos in the Erongo Region. The report provides a summary of the environmental performance since the granting of the Environmental Clearance Certificate on 22 March 2019 and the last environmental audit on August 2020. Manger Mining and its contractors have proceeded with the extraction activities. The location of the Mining License 91 (ML 91) is shown in **Figure 1**.

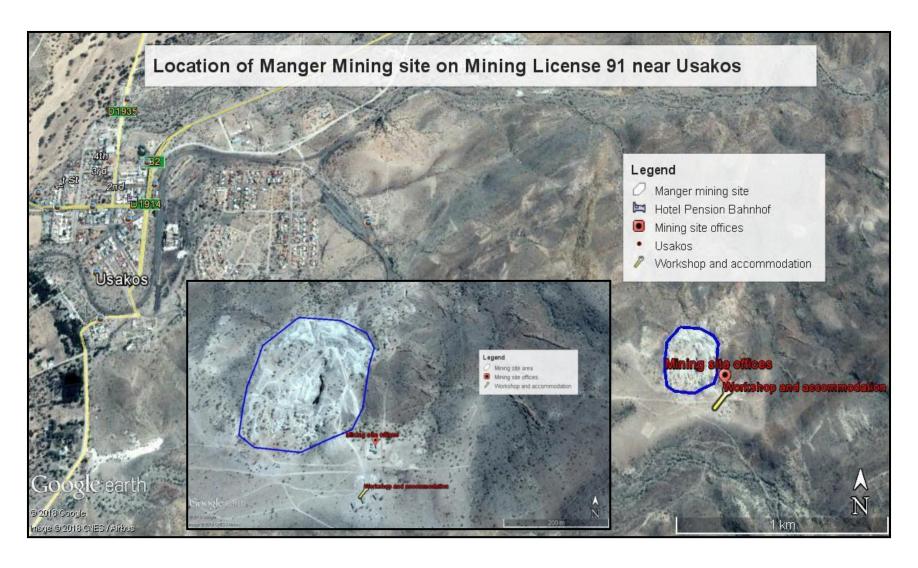


Figure 1: Location of the mining license 91 near Usakos, Karibib District, Erongo Region

1.2 Purpose of the Environmental Compliance (Audit) Report

An Environmental Audit Report provides the link between the impacts identified in the EIA Process and the required environmental management on the ground during project implementation and operation, as assessed during compliance monitoring.

The compilation of this Environmental Audit Report was one of the requirements (scope of work) presented to Excel Dynamic Solutions (Pty) Ltd by The Proponent, to ensure environmental compliance with reference to the Environmental Management Plan (EMP), which has been prepared as a legal requirement by Section 8 of the Environmental Management Act (EMA), No. 7 of 2007 and its 2012 Environmental Impact Assessment (EIA) regulations.

This Environmental Audit Report serves to document the progress made on the minng works of ML 91. The phases of the renewal of the extraction of tourmaline activities are summarized below:

- Operation and maintenance This is the phase during which the operation of Manger Mining (Pty) Ltd is extracting tourmaline specimens from the mining pit and undertaking related activities on site. It is also the phase during which maintenance of the mining pit, equipment and machinery is done by Manger Mining themselves.
- Environmental Monitoring Requirements In order to support and ensure that the proposed mitigation measures are achieving the desired results, a monitoring plan was implemented alongside the mitigation plan.
- Decommissioning and Rehabilitation This is the phase during which the mining of the
 target commodity cease. The decommissioning of the mining operations may be
 considered due to declining in the tourmaline specimens (below profitable specimens)
 and/or low demand for the mined tourmaline (falling of commodity prices on the market).
 During the operational phase and before decommissioning, the Proponent will need to put
 site rehabilitation measures in place.

It is expected from Manger Mining and its employees and/or contractors in guiding them during the mining operations to ensure that impacts on the environment, are avoided or limited if they cannot be avoided completely.

1.3 Appointed Environmental Assessment Practitioner

Manger Mining has appointed Excel Dynamic Solutions (Pty) Ltd, an independent team of Environmental Consultants to conduct the required Environmental Assessment process and prepare a detailed Environmental Management Plan that can be used as guide to monitor compliance to the recommendations made in the EIA; and thereafter, submit the Environmental Clearance Certificate (ECC) application to the Ministry of Environment, Forestry and Tourism and Ministry of Mines and Energy on their behalf.

Excel Dynamic Solutions (Pty) Ltd has been appointed as the external Environmental Control Officer (ECO) to ensure EMP compliance throughout the project life cycle, with the conditions of authorization, in performing environmental monitoring and auditing, in order to produce the subsequent bi-annual environmental compliance reports.

This document was compiled by Ms. Rose Mtuleni, and reviewed by Mr. Nerson Tjelos.

1.4 Environmental Auditing

The current baseline is expected to be reviewed and progress inspected according to the EMP that had been provided as part of the application for the Mining License 91, rendering bi-annual compliance reports a requisite part of environmental monitoring. In addition to the compliance audit and review provided in this report, the EMP is to be revised, and any monitoring gaps realized, identified; additional best practice measures that were absent from the previous EMP will be implemented. Site inspection is done as part of this submission.

1.5 Details of the Project Proponent

The details of the Proponent are presented in **Table 1** below.

Table 1: Proponent contact details and purpose of the ECC

Table 1.	able 1. Proponent contact details and purpose of the Loo			
Full name of	Physical Address & Contact	Postal Address	ECC Application for:	
Proponent	number			
Manger	Mansfield Farm 66, Usakos,	P. O. Box 3013,	Renewal of Mining License (ML) 91 and	
Mining (Pty)	Karibib District	Windhoek, Namibia	Associated Activities on Mansfield Farm	
Ltd	Tell: +264 (0) 61 223 396/081		66 near Usakos, Karibib District in the	
	128 3234		Erongo Region	
	120 3234			

2 EMP ROLES AND RESPONSIBILITIES

As the ML holder, Manger Mining is ultimately responsible for the implementation of the EMP, and has delegated the responsibility for the effective implementation of the EMP to Excel Dynamic Solutions (Pty) Ltd.

2.1 Environmental Management Plan Actions and Audit

The aim of the management actions of the EMP is to avoid potential negative impacts where possible. Where impacts cannot be avoided, measures are provided to reduce the significance of these impacts. It is therefore important for the Proponent/Environmental Manager to be sure to adhere to the management actions.

Management actions recommended for the potential impacts rated in the EA carried out for the mining activities were based on the three project phases listed below:

- Phase 1: Operation and Maintenance (Table 3)
- Phase 2: Monitoring (**Table 4**)
- Phase 3: Decommissioning and Rehabilitation

The responsible persons at Manger Mining (Pty) Ltd should assess these commitments in detail and should acknowledge their commitment to the specific management actions detailed in the phases given under the following subsections. The compliance levels thereof, are measured in **Tables 3** and **4**.

2.2 Key Potential Environmental Impacts to be managed

From the EIA conducted, the following key potential negative impacts have been identified per project phase and are summarized in **Table 2** below.

Table 2: Summary of key potential environmental impacts per project phase

	Potential negative impacts identified in the EA
1	Health and safety, visual, waste, noise
2	Access to site
3	Visual impacts on landscape, Sufficiency of rehabilitation measures,

2.3 Phase 1: Operation (and Maintenance) Phase Management Action Plans

The management action plans recommended for this phase are presented in **Table 3** below.

Table 3: Management action plans for the Operation and Maintenance Phase and EMP Audit

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
EMP training	 Employees appointed for operation and maintenance on respective site must ensure that all personnel are aware of necessary health, safety and environmental considerations applicable to their respective works. 	This mining project has 4 staff members – all have been made aware.	COMPLIANT	N/A
Monitoring	 The ECO or the Proponent should monitor the implementation of this EMP. An EMP non-compliance penalty system should be implemented on site. 	Undertaken on a weekly bases. No general noncompliance penalty system in place for the mining project. The crew size is also small, manageable and adherent to the safety, health and environment regulations thus far.	PARTIALLY- COMPLIANT	Implement a non-compliance penalty system based on the environmental features identified in the EMP, in order to ensure effectiveness of EMP mitigation measures for mining works.

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
Visual Impacts	All the necessary options to improve the	The site is kept tidy and	COMPLIANT	N/A
(sense of	aesthetic of the site should be considered and	shows consideration of		
place)	incorporated in the mining activities and plans.	the natural aesthetic of		
		the site, particularly		
		preservation of		
		surrounding		
		vegetation.		
Biodiversity	Vegetation found on the site, but not in the	No vegetation has	COMPLIANT	N/A
	targeted mining areas should not be removed,	been removed from		
	but left to preserve biodiversity on the site.	site.		
	 Shrubs, trees or shrubs found along new mining spots on sites should not be unnecessarily removed. Care should be taken so that mining activity occurs without destroying the vegetation. 	All staff are made aware	COMPLIANT	N/A
	 Workers should refrain from killing or snaring animals' species (big or small) that may be found on the site. 	All staff are made aware	COMPLIANT	N/A

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	Environmental awareness on the importance	Not separately	COMPLIANT	N/A
	of biodiversity preservation should be	implemented, but		
	provided to the workers	addressed through the		
		two measures above,		
		on protection of		
		animals and		
		vegetation.		
Employment	Preference for casual works during	No casual workers	COMPLIANT	N/A
	operational phase should be given to Karibib's	employed.		
	locals.			
	No recruitment should be done on site.	All vacancies are	COMPLIANT	N/A
		sourced locally face to		
		face. There is no		
		recruitment on site as		
		members of the public		
		are not allowed		
		anywhere near the		
		mining area.		
Air Quality	Mining schedule should be limited to the hours	The work hours are	COMPLIANT	N/A
	between 08h00 and 17h00. This will keep the	adhered to.		
	vehicle-related dust level minimal in the area.			

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	Since the project site is in an area where, due	Water is kept on site for	COMPLIANT	N/A
	to little vegetation cover, soils are exposed, it	this purpose.		
	is highly probable that more dust will be			
	generated from mining (excavating). It is			
	therefore advisable that in extremely windy			
	days, a reasonable amount of water should be			
	used to suppress the dust that may be			
	emanating from certain mining areas on the			
	site.			
Waste	Workers should be sensitised to dispose of	Waste is collected and	COMPLIANT	N/A
Generation	waste in a responsible manner and not to	then removed from the		
	litter.	site once a week, taken		
		to the Usakos dump		
		site.		
	After each daily works, the Proponent should	The mine manager	COMPLIANT	N/A
	ensure that there are no waste left at the	inspects the site for		
	mining pit and the work site.	waste after the workers		
		have left.		
	All domestic and general operational waste	Waste is collected and	COMPLIANT	N/A
	produced on a daily basis should be contained	contained on site until it		
	until such that time it will be transported to	can be disposed of.		
	designated waste sites.			

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	No waste may be buried or burned on site or anywhere else.	Waste is stored on site and removed for disposal once a week.	COMPLIANT	N/A
	The mining site should be equipped with separate waste bins for hazardous and general waste/domestic.	There is no hazardous waste used or generated on site.	COMPLIANT	N/A
	A penalty system for irresponsible disposal of waste on site and anywhere in the area should be implemented.	Workers have been notified of the precautions, however, no penalty system is in place yet.	PARTIALLY COMPLIANT	Implement a penalty system for irresponsible waste disposal on site and surrounding areas.
Health and Safety	As part of their induction, the workers should be provided with an awareness training of the risks of mishandling equipment and materials on site.	Implemented. Training is provided for all new recruits.	COMPLIANT	N/A
	During operations on site, employees should be properly equipped with personal protective equipment (PPE) such as coveralls, masks, gloves, safety boots, earplugs, safety glasses, hard hat etc.	The required PPE is provided to workers during works on site.	COMPLIANT	N/A

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	 Workers should not be allowed to consume alcohol or any other intoxicants prior to and during working hours as this may lead to mishandling of equipment which results into injuries and other health and safety risks. Employees should not be allowed on site if under the influence of alcohol or any other intoxicants. 	Consumption of alcohol/intoxicants is prohibited on sites during working hours. Regular inspection occurs on site. Consumption of alcohol/intoxicants is prohibited on sites during working hours. Employees found under the influence of alcohol are sent home immediately and given	COMPLIANT	N/A
Noise	The mining operational times should be set such that, no activity is carried out during the	a written warning. No mining is undertaken at night.	COMPLIANT	N/A
	night or very early in the mornings.	Employees arrive at the mine to begin work at 08:00 each morning on week days.		

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	Mining hours should be restricted to between	No mining is	COMPLIANT	N/A
	08h00 and 17h00 to avoid noise generated by	undertaken at night.		
	mining equipment and the movement of	Employees arrive at the		
	vehicles before or after hours.	mine to begin work at		
		08:00 each morning on		
		week days.		
	When operating machinery onsite, workers	Employees are	COMPLIANT	N/A
	should be equipped with personal protective	properly equipped with		
	equipment (PPE) such as earplugs to reduce	PPE during works on		
	noise exposure	site		
Soils	Spill control preventative measures should be	There is no hazardous	COMPLIANT	N/A
	put in place to manage soil contamination, no	liquids/waste used on		
	matter how small the amount of pollution (spill)	this site. Minor fuel/oil		
	is.	spills are attended to		
		immediately.		
	Site soils should not be disturbed, if not	Only the site area	COMPLIANT	N/A
	needed or related to the actual mining works.	directly related to		
		mining works is worked		
		on.		
	Overburden material should be handled more	Overburden material	COMPLIANT	N/A
	efficiently during mining operations to avoid	handled efficiently		
	erosion when subjected to erosional			
	processes.			

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	Prevent the creation of huge piles of waste	Backfilling is	COMPLIANT	N/A
	materials by performing sequential backfilling	undertaken.		
	where possible			
Archaeology	Caution should be exercised when carrying	No sites of	COMPLIANT	N/A
and cultural	out excavations associated with the mining	heritage/archaeological		
heritage	activities in the event that	significance discovered		
	archaeological/heritage remains are	on site up to this stage.		
	discovered.			
	The worksite/mining manager should	EDS has provided the	COMPLIANT	N/A.
	familiarise themselves with the National	Project Manager with		
	Heritage Council's regulations	relevant NHC		
		regulations/procedures		
		(Appendix B).		
Communication	The Proponent should appoint a Public	Very small operation of	COMPLIANT	N/A
	Relation Officer (PRO) to liaise with the	4 staff. Mining site is		
	farmers/landowners.	only on one farm and		
		good relations with the		
		farm owner are		
		maintained.		

Environmental Feature	Management Actions	Observations	Compliance comment	Corrective Action/Recommendation
	The PRO should be introduced to the neighbors to the site and his or her contact details provided to them prior to undertaking activities for easy communication during the mining activities.	Mining site is only on one farm and good relations with the farm owner are maintained.	COMPLIANT	N/A
	The Proponent should compile a clear communication procedure/plan which should include a grievance mechanism for employees.	No communication procedures and/grievance mechanism are in place	NON-COMPLIANT	Implement a communication procedure/grievance mechanism for human resources within the company.
COVID-19	 The workers should be engaged in health talks and training about the dangers of infections such as Covid-19. 	Included in induction for any new staff	COMPLIANT	N/A
	Provision of any available public health education information to workers.	Included in induction for any new staff.	COMPLIANT	N/A
	Observation of social distancing, provision of health education on the novel Coronavirus and regular distribution of masks and hand sanitizer on site.	Observed.	COMPLIANT	N/A

2.4 Phase 2: Monitoring Phase Management Action Plans

In order to support and ensure that the mitigation measures are achieving the desired results, a monitoring plan must be implemented. The management action plans recommended for mining operations are presented in **Table 4** below.

Table 4: Management action plans for the Monitoring Phase and EMP Audit

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
Soils	 All measures should be considered to prevent the loss of top soil. 	Weekly	Areas that are not part of the mining/extraction process area remain undisturbed.	COMPLIANT	N/A
Monitoring	The ECO or the Proponent/Contractor should monitor the implementation of the EMP to ensure compliance.	Daily	Regular monitoring (daily and weekly) occurs, and is audited bi-annually by consultant	COMPLIANT	N/A

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
	The ECO(s) should inspect the site throughout the mining period and after completion.	Daily	Frequent environmental inspections are observed. External Environmental audits occur and will continue until rehabilitation and closure phase of mine.	COMPLIANT	N/A
Biodiversity	 Clear only minimal access tracks where necessary, to maintain as much of the remaining natural vegetation on site and to prevent loss of habitat outside areas of mining interest. No equipment should be left leaning on or on top of the site 	Weekly	There is minimal vegetation in the area. No vegetation within the mining area.	COMPLIANT	N/A
	shrubs or trees during and after mining work.		the mining area.		

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
Health and	Mining workers should be trained	Daily/Weekly	Training undertaken.	COMPLIANT	N/A
Safety	on how to handle materials and				
	equipment on site (if they do not				
	already know how to) in order to				
	avoid injuries.				
	Mining equipment and materials	Daily/Weekly	Equipment is	COMPLIANT	N/A
	transported to site should be		secured to the back		
	securely fastened to the vehicles		of the mine vehicle		
	(trucks and cars). This is to		securely when		
	ensure that the materials and		transporting to and		
	equipment do not fall off the		from the mine.		
	vehicles and cause injuries to				
	anyone while transporting them.				

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
	The proponent and ECO/SHE Officer should ensure that all personnel are provided with appropriate personal protective equipment (PPE), such as gloves, masks, safety boots, safety glasses and hard hats at all times during mining (operation) hours on site to prevent serious injuries or loss of life.	Daily/Weekly	Staff are provided with the required PPE for mining operations.	COMPLIANT	N/A
	No employee should be allowed to consume alcohol or any other intoxicants prior to and during working hours as this may lead to mishandling of equipment which may result into injury and/or other health and safety risks	Daily/Weekly	Monitored regulalrly.	COMPLIANT	N/A

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
Neighbours to the site	 Mining works schedule should be limited to normal working hours, between 08h00 and 17h00. This is to ensure generated noise does not disturb residents during home hours. 	Weekly	The working hours are adhered to.	COMPLIANT	N/A
Waste	The mining site should be kept tidy at all times. All domestic and general construction waste produced on a daily basis should be cleaned and contained daily to prevent environmental pollution.	Daily	Regularly monitored. Adhered to. Regularly monitored. Adhered to.	COMPLIANT	N/A
	Avoid combining of hazardous and non-hazardous waste by providing separate waste containers (bins) for hazardous and domestic / general waste must be provided on site.	Daily	Regularly monitored. Adhered to. No hazardous waste is used or generated on site.	COMPLIANT	N/A

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
Transport	 Mining project workers will be transported, in an SUV/ bus (or similar suitable passenger vehicle) to and from site prevent inhaling of dust. 	Daily	Workers reside on site during the week.	COMPLIANT	N/A
Vehicular traffic safety	 All drivers of the project vehicles should be in possession of valid and appropriate driving licenses to operate such vehicles. 	Weekly	Copies of valid driving licenses are on file.	COMPLIANT	N/A
	 Project vehicles should be in a roadworthy condition and serviced regularly in order to avoid accidents as a result of mechanical faults of vehicles. 	Weekly	Service undertaken as and when needed.	COMPLIANT	N/A
	 Vehicle drivers should not be allowed to operate vehicles while under the influence of alcohol or any other intoxicants. 	Weekly	Monitored regularly.	COMPLIANT	N/A

Environmental Feature	Management Actions/Monitoring Objectives	Frequency (Effective upon commencem ent of operations)	Observation	Compliance	Recommen ded Action
	No heavy trucks or project related	Weekly	All mine vehicles and	COMPLIANT	N/A
	vehicles should be parked next to		equipment is parked		
	the residents' properties or		at the mining site and		
	obstruct the local traffic in any		only used on site.		
	way.		(Appendix D, Fig. 5)		

SUMMARY OF COMPLIANCE

This environmental audit has identified 35 management actions and 18 monitoring actions. After on site observation, one (1) out of the 35 management actions has been identified as *Non-compliant*, and two identified as *Partially Compliant*. Thirty-two (32) of the management actions were observed as *Compliant*. All 18 monitoring actions were identified as *Compliant*. The large proportion of compliant action recorded for the environmental audit, therefore, renders the general state of the ongoing Operations and Maintenance phase of the project *Compliant*. According to the overall observation of this audit, Manger Mining have been cautious and have paid attention to the environmental aspects and compliance of this project.

There were no serious issues of Non-Compliance identified during this Environmental Audit.

This environmental audit has identified two issues of Partial Compliance, which may be regarded jointly as one issue, requiring a single solution/intervention. The audit has also identified one issue of Non-compliance. The issues identified have thus far had little to no significant negative effects to the mining operations, the employees and the environment; and are, therefore, regarded as minor non/partial-compliances. The compliance issues are identified as:

- 1. There is no penalty system for waste disposal and general EMP non-compliance in place
- 2. There are no communication procedures and grievance mechanisms in place for employees.

3 CONCLUSION AND RECOMMENDATIONS

The minor par5tial and non-compliances identified in this biannual environmental audit report need corrective action in order for the mining operations of Manger Mining CC to reach a 100% Compliance rate. Recommendations for corrective action are as follows:

- Implement a penalty system for EMP Compliance to enforce accountability towards environmental management within mining operations
- Implement a communication procedure/grievance mechanism for human resources within the company.

The potential positive and negative impacts stemming from the mining activities were identified, assessed and mitigation measures made thereof. Mitigation measures need to be adhered to at all times. Most importantly, monitoring of the environmental components described in the Environmental Management Plan should be conducted by the Proponent and an appointed Environmental Health Officer or any applicable Competent Authority.

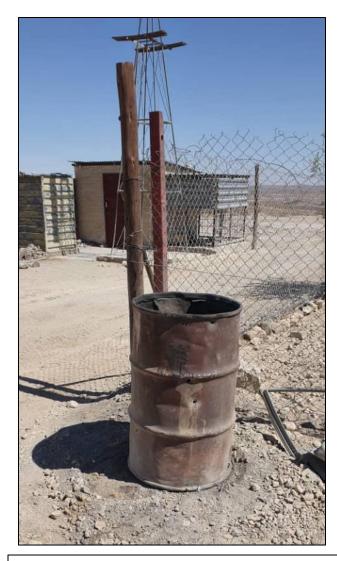
The next site inspection will be undertaken in September 2022, and a resultant audit report will be produced thereafter.

APPENDIX A:

AUDIT OBSERVATIONS (Pictures)



A sign at mine entrance restricting access due to mining activity on site



A waste container at a waste collection site on the mine



The mining pit with vegetation on its edge still intact





Mining equipment at storage sites

APPENDIX B:

CHANCE FINDS PROCEDURE

(Heritage & Archaeology)

CHANCE FINDS PROCEDURE

(After Kinahan, 2020)

Areas of proposed development activity are subject to heritage survey and assessment at the

planning stage. These surveys are based on surface indications alone, and it is therefore possible

that sites or items of heritage significance will be found during development work. The procedure

set out here covers the reporting and management of such finds.

Scope: The "chance finds" procedure covers the actions to be taken from the discovery of a

heritage site or item to its investigation and assessment by a trained archaeologist or other

appropriately qualified person.

Compliance: The "chance finds" procedure is intended to ensure compliance with relevant

provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): "a person who

discovers any archaeological objectmust as soon as practicable report the discovery to

the Council". The procedure of reporting set out below must be observed so that heritage remains

reported to the NHC are correctly identified in the field.

Manager/Supervisor must report the finding to the following competent authorities:

National Heritage Council of Namibia's Head Office (061 244 375) and Technical

Office (061 301 903)

National Museum (061 276800),

National Forensic Laboratory (061 240461).

Archaeological material must NOT be touched. Tempering with the materials is an offence under

the heritage act and punishable upon conviction by the law.

Responsibility:

Operator: To exercise due caution if archaeological remains are found

Foreman: To secure site and advise management timeously

Superintendent: To determine safe working boundary and request inspection

Archaeologist: To inspect, identify, advise management, and recover remains

Procedure:

Action by person identifying archaeological or heritage material:

- a) If operating machinery or equipment stop work
- b) Identify the site with flag tape
- c) Determine GPS position if possible
- d) Report findings to foreman

Action by foreman

- a) Report findings, site location and actions taken to superintendent
- b) Cease any works in immediate vicinity

Action by superintendent

- a) Visit site and determine whether work can proceed without damage to findings
- b) Determine and mark exclusion boundary
- c) Site location and details to be added to project GIS for field confirmation by archaeologist

Action by Archaeologist

- a) Inspect site and confirm addition to project GIS
- b) Advise NHC and request written permission to remove findings from work area
- c) Recovery, packaging and labelling of findings for transfer to National Museum

In the event of discovering human remains

- a) Actions as above
- b) Field inspection by archaeologist to confirm that remains are human
- c) Advise and liaise with NHC and Police
- d) Recovery of remains and removal to National Museum or National Forensic Laboratory, as directed.



Reg. 2019/0817

31 March 2022

The Environmental Commissioner
Department of Environmental Affairs
Ministry of Environment and Tourism
Private Bag 13306
Windhoek

Attention: Mr. Timoteus Mufeti

Dear Sir

Anh

SUBMISSION: BI-ANNUAL ENVIRONMENTAL AUDIT REPORT FOR MINING LICENSE (ML) NO. 91 NEAR USAKOS IN THE KARIBIB DISTRICT, ERONGO REGION, NAMIBIA.

Excel Dynamic Solutions (Pty) Ltd was appointed by Manger Mining (Pty) Ltd to prepare and submit the bi-annual environmental audit report for the Mining Licence No. 91 located near Usakos in the Erongo Region.

The audit report has been prepared according to the findings of the Scoping Report and the Environmental Management Plan for which an Environmental Clearance Certificate was granted in March 2019. For the purpose of this submission, the bi-annual environmental audit report, as per the requirements of the granted Environmental Clearance Certificate (ECC), is attached.

Please do not hesitate to contact us should you need further information.

Yours faithfully

Nerson Tielos

Head of Projects