



ECC-84-201-REP-15-D

ENVIRONMENTAL SCOPING REPORT PROPOSED CONSTRUCTION OF A 66 KV POWERLINE AND ASSOCIATED INFRASTRUCTURE

PREPARED FOR





TITLE AND APPROVAL PAGE

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EXECUTIVE SUMMARY

Environmental Compliance Consultancy (ECC) has been engaged by Afritin Mining (Namibia) (PTY) Ltd on behalf of NamPower to undertake the Environmental Impact Assessment (EIA) for the construction of a proposed 66 Kilovolt (kV) powerline and its associated infrastructure.

The purpose of this application is to construct a 66 kV powerline (approx. 1 km long) and its associated infrastructure to supply power to the Uis Tin Mine. The powerline and associated infrastructure will be located within the Accessory Work Permit area, permitted by the Ministry of Mines and Energy (16 October 2018) in terms of Section 90 (3) of the Minerals Act 33, 1992.

The findings of the environmental and social assessment undertaken for the proposed project presented in this scoping report, which have been undertaken in terms of the Environmental Management Act, 2007 and the Environmental Impact Assessment Regulations, 2007 (No. 30 of 2011) gazetted under the Environmental Management Act (EMA), 2007 (Act No. 7 of 2007) (referred to herein as the EIA Regulations). This scoping report and appendices will be submitted to the Directorate of Environmental Affairs (DEA) at the Ministry of Environment and Tourism (MET) for review as part of the environmental clearance certificate application.

This report has been prepared by Environmental Compliance Consultancy (ECC). ECC's terms of reference for the assessment is strictly to address potential effects, whether positive or negative, and their relative significance, and explore alternatives for technical recommendations and identify appropriate mitigation measures for the proposed project.

Environmental Impact



Low potential environmental impact – located within a disturbed footprint on the mine site. No significant environmental impact – low impact project, minimal disturbance, low risk of environmental incident.

Social Impact



The Uis Tin Mine currently has no constant power supply to the trial processing plant. Network strengthening, which involves the establishment of a powerline into the area, is therefore necessary.

- The proposed powerline and associated infrastructure are expected to contribute positively towards efficient mining operations, accommodating for both present and future energy needs of the mine site.
- Increasing the mines productivity will lead to economic and social development

Recommendation

Based on the outcome of this impact assessment, ECC is of the opinion that the application for the proposed powerline and associated infrastructure should be approved as the project's benefits outweigh negative impacts and the proposed project has a sound motivation, demonstrating the need and desirability thereof.



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Definitions and Abbreviations

ASL	Above Sea Level
DEA	Directorate of Environmental Affairs
ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence
На	Hectares
HSE	Health, Safety and Environment
I&AP	Interested and affected parties
IFC	International Finance Corporation
kV	Kilovolt
MAWF	Ministry of Agriculture Water and Forestry
MET	Ministry of Environment and Tourism
ML	Mining Licence
ToR	Terms of Reference



1 INTRODUCTION

1.1 BACKGROUND

Environmental Compliance Consultancy (ECC) has been engaged by Afritin Mining (Namibia) (PTY) Ltd on behalf of Nampower to undertake the Environmental Impact Assessment (EIA) for the proposed construction of a 1 km, 66 Kilovolt (kV) powerline and associated infrastructure.

The terms of reference (ToR) for this scoping study and EIA is to address possible impacts, explore alternatives, develop technical recommendations and mitigation measures for the proposed powerline and its associated infrastructure, in terms of the requirements of the Environmental Management Act, 2007 and its regulations.

ECC has identified potential environmental impacts through a project-specific environmental and social impact assessment and suggested mitigation measures for the proposed project as discussed within this report. In order to address these potential impacts, considering that the proposed site is located within an already disturbed footprint, specialist studies were not deemed necessary due to the low potential of disturbance. A desktop study and site assessment were conducted to identify areas of potential concern and propose mitigation measures to prevent environmental harm.

Afritin Mining (Namibia) (PTY) Ltd is a mining company with a portfolio of tin assets in Namibia and South Africa. The company was established in 2017. Afritin obtained their environmental clearance certificate on the 9th August 2017, for mining activities at mining license (ML)129,133 and 134 of the Uis Tin Mine.

The Uis tin mine project consists of three separate mining licences, ML129, ML133 and, ML134, each of which has been explored for tin on varying scales in the past. Mining operations are currently confined to ML 134. The proposed powerline will not trigger any new listed activities or new impacts that have not already been adequately addressed through the previous scoping assessments:

Environmental Impact Assessment Report for the Re-commissioning of the Uis Tin and Tantalum Mine, Uis Namibia (EnviroSolutions, 2013).

1.2 Environmental Requirements

1.2.1 LISTED ACTIVITIES

The Environmental Management Act, 2007 (Act No. 7 of 2007) stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the proposed project are as follows:

ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES

1.b The transmission and supply of electricity

INFRASTRUCTURE

- 10.1 The construction of:
 - (f) Cableways
 - (g) Communication networks including towers, telecommunication, and marine telecommunication lines and cables.



2 TERMS OF REFERENCE

The Term of Reference (ToR) for this assessment is to address possible impacts and explore alternatives for technical recommendations based on the requirements set out by the Environmental Management Act (2007) and its regulations.

The report serves as a basis for information to authorities, the public and stakeholders to aid in the decision-making process for the proposed project.

The objectives of this report are to:

- Provide a description of the proposed activity and the site on which the activity is to be undertaken, and the location of the activity on the site
- Provide a description of the environment that may be affected by the activity
- Identify the laws and guidelines that have been considered in the assessment and preparation of this report
- Provide details of the public consultation process undertaken
- Provide a high-level of environmental impact assessment on feasible alternatives that were considered
- Report the assessment findings, identifying the significance of effects, and
- Provide justification for the approval of an Environmental Clearance Certificate.



3 PROJECT DETAILS

3.1 **PROJECT OWNERSHIP**

The project is owned by Afritin Mining (Namibia) (PTY) Ltd, a mining company with a portfolio of tin assets in Namibia and South Africa. All compliance and regulatory requirements regarding this assessment document should be forwarded by email or post to the following address:

The Consultant:	The Proponent:
Environmental Compliance Consultancy	Mr Ralf Schommarz- Mine Manager of Uis Mine
PO BOX 91193	Old Power Station Complex, Second Floor
Klein Windhoek, Namibia	Armstrong Street, Windhoek, Namibia
Tel: +264 81 699 7608	Tel: +264 81 124 7395
Email: info@eccenvironmental.com	Email: ralf.schommarz@afritinmining.com

3.2 PROJECT LOCATION

The Uis tin mine project is located in Uis in the Erongo Region of Namibia. The site is approximately 333 km north west of Windhoek. Uis can be accessed via the C36 road from Omaruru or from the coast via Henties Bay. AfriTin has three separate mining licences, ML129, ML133, and ML134, as shown in Figure 1.

Currently, all activities are carried out on ML 134. The total size of ML 134 is approximately 197 km², and the mining footprint is 8 km² which is only a fraction of the total licence area. No activities are currently taking place on ML 133 and ML 129, with the exception of baseline exploration.

The proposed powerline and associated infrastructure are located within ML 134, as shown in Figure 1.



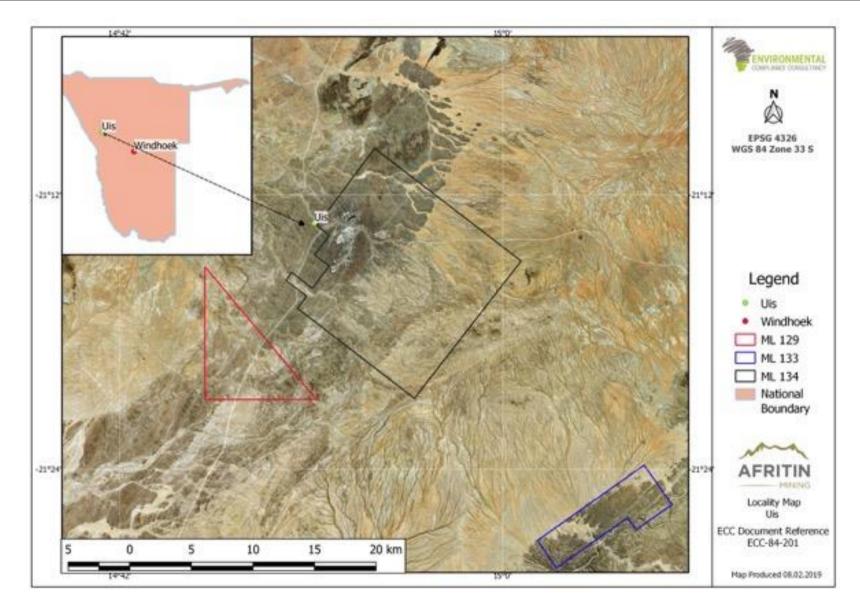


FIGURE 1 - UIS LOCALITY MAP



4 **PROJECT DESCRIPTION**

Tin was discovered at Uis by the German Colonial Gesellschaft in 1911. Mining commenced in 1923 under the name of Namib Tin Mines Ltd. After a few changes in ownership, Imcor Tin (Pty) Ltd bought Uis in 1958. Imcor steadily enlarged the capacity of the mine and also started to develop the town of Uis, providing infrastructure and service facilities as well as housing for employees. In 1980 capacity was again enlarged to become the largest hard-rock tin mine in the world. Operations ceased as a result of depressed tin prices in 1990.

Currently, the Uis tin mine project consists of three project areas. The subject of the project is a pegmatite hosted tin deposit, one of the largest open castable deposits of its kind. The project areas are fully permitted and offer near-term production with low stripping ratios. Uis has a non-JORC compliant resource of 73 million tonnes at 0.136% stannum (Sn) with an additional 2.7 million tonnes at 0.015% Ta₂O₅.

In order to determine the viability of the project, a trial plant is required. Power is needed to operate the trial plant, hence this application for the environmental clearance certificate. Uis tin mine currently has no constant power supply to the trial processing plant. Network strengthening, which involves the establishment of a powerline and associated infrastructure, is needed to ensure continuous power quality and reliability, also when demand will continue to increase.

The is a need and desire to construct the powerline and associated infrastructure to supply power to the trial processing plant. The powerline will be through an offtake from the existing NamPower substation and situated in proximity to NamClay Bricks factory (see Figure 2).

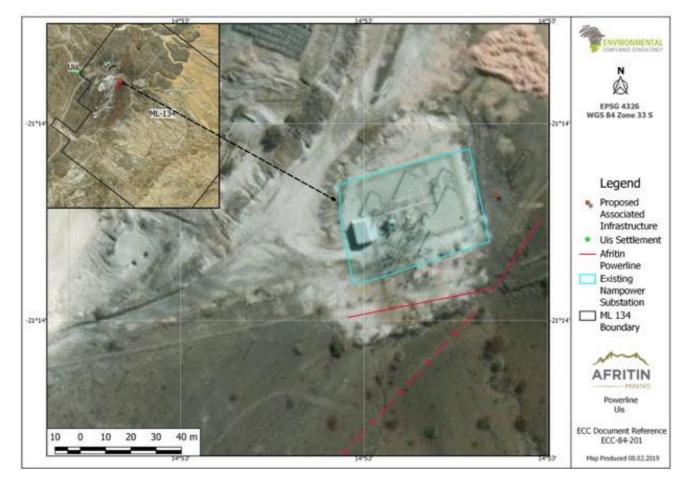


FIGURE 2 - EXISTING NAMPOWER STATION AND ASSOCIATED INFRASTRUCTURE



The construction of the approximately 1 km long, 66 kV powerline and associated infrastructure on an accessory works permit area, is shown in Figure 3. The proposed infrastructure will be located on the land immediately adjacent to the existing substation and will occupy an area of approximately 10 m². Figure 3 shows the alignment of the powerline.

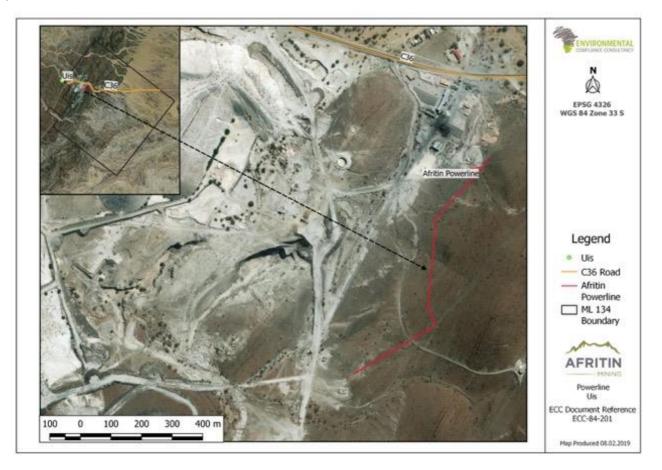


FIGURE 3 - LOCATION OF POWERLINE

4.1 PROPOSED POWERLINE AND ASSOCIATED INFRASTRUCTURE

The first phase of the power supply project will comprise of:

- Transmitting power from the main grid to the metering station
- Construction of a metering station adjacent to the existing substation, and
- Following completion, Nampower would undertake the ongoing operation and maintenance of the transmission line infrastructure.

4.2 CONSTRUCTION PHASE

The construction phase includes activities such as:

- Vegetation removal (as and when required)
- Connection to the existing substation
- Installation of prefabricated standard substation components
- Minor ground preparation (trenches and levelling) of the site, for the installation of wooden poles



- Construction of bunds and oil holding dams (for the emergency holding of transformer oil in the event of a spill) and safety walls
- Concrete casting
- Redirecting the existing lines to enter and leave the new metering station, and
- Construction of parameter fencing and lighting.

Equipment and material will be stockpiled for construction in staging areas, which are located near the existing NamPower substation. The powerline project (approx. 1 km long) subsequently may not require multiple staging areas due to the short distance of the line and easy access to central materials. The extent of new access road construction would not be required for the construction and maintenance of the line; existing roads will be used.

The construction of the on-site powerline and associated infrastructure will create approximately 8 jobs, with the majority of employment opportunities during construction reserved for Namibians in line with the NamPower local recruitment policy. Onsite construction camps will not be required as staff would be transported to and from the job site daily.

Delivery of construction material and equipment will require heavy transport vehicles, but no abnormal or hazardous loads are expected. The typical equipment to be transported would include transformers, cables, and poles. Construction vehicles are to make use of the existing roads to transport equipment and material to the construction site and have to comply with the Namibian road rules.

During the construction phase, minimal vegetation clearing will be required as the area has already been disturbed. The terrain is also very rocky, hence it is easy to avoid disturbance of the limited vegetation that occurs on the slopes.

4.3 OPERATIONAL PHASE

During normal operation, power transmission lines and associated infrastructure require very little intervention. The only exception is periodic inspections and vegetation management. Inspections will be frequently conducted by the site manager, typically on foot due to the small area of the powerline. Monthly inspections at the substations are usually scheduled. Yearly maintenance takes place during working hours and can last from one day to two weeks. Rarely is maintenance work done at night, outside working hours.

Neither the powerline nor the associated infrastructure requires waste removal or treatment

NamPower will maintain the powerline and the associated infrastructure to ensure the longevity of the infrastructure and to secure current and potential future use.

4.4 DECOMMISSIONING PHASE

Should the proposed powerline and associated infrastructure no longer be required, i.e. at the end of the life of mine, the powerline and associated infrastructure would be decommissioned and removed. Alternatively, and with the agreement of stakeholders, the powerline and associated infrastructure could remain for beneficial future use.



5 CONSULTATION

Public participation and consultation are a requirement stipulated in Section 21 of the Environmental Management Act, 2007 and its regulations for a project that requires an environmental clearance certificate. Consultation is a compulsory and critical component in the EIA process in achieving transparent decision-making and can provide many benefits.

The key aim of the consultation process is to inform stakeholders and interested and affected parties (I&AP) about the proposed project. The methods undertaken for the proposed project are detailed as follows, which are in line with the requirements of the EIA Regulations.

5.1 NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in two newspapers namely the 'Namibian' on the 27th February and 6th March and the 'Informante' on the 7th and 14th March 2019. The purpose of this was to commence the consultation process by informing the public about the project and enabling I&APs to register an interest with the project. The site notices can be found in Appendix C.

5.2 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed project; sets out the EIA process and when and how consultation is undertaken and provides contact details for further project-specific inquiries to all registered I&APs. The NTS was distributed to registered I&APS and can be found in Appendix A.

5.3 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of a proposed project. The notice was set up at the fence of the Town Council as illustrated in Appendix B.

5.4 CONSULTATION FEEDBACK

No issues or concerns were raised by the I&APs to date. The registered I&APs are set out in Appendix D.



6 **RISK ASSESSMENT AND PROJECT ALTERNATIVES**

A key component of any environmental impact assessment is the process of conducting a baseline risk assessment. A high-level qualitative risk assessment has been completed using ECC's environment and social risk assessment matrix.

For the proposed project, four possible scenarios and alternatives have been considered as outlined below:

Option 1 – Proceed with the construction of the powerline and associated infrastructure.

Option 2 – Do not proceed with the powerline and associated infrastructure.

Option 3 – Alternative power generation sources/technologies e.g. renewable energy or generators.

Option 4 – Alternative locations for the powerline and associated infrastructure.

The objectives of the risk assessment were to:

- I. Identify areas of uncertainty that need further study to enable a more accurate assessment of risks to be made.
- II. Compare the risks associated with the four scenarios.
- III. Identify risk controls and assess the residual risks associated with the four scenarios.
- IV. Identify where further study is needed to reduce the risks associated with the four scenarios to acceptable levels.

6.1 RISK ASSESSMENT OUTCOMES

For the four scenarios, the identified high-level risks primarily related to:

- No power supply to the trial plant
- The collision of birds into the powerline
- Vegetation clearing and habitat destruction, and
- No power supply to the trial plant resulting in job loss.

For each of the alternatives and scenarios above the high-level risks were identified, impacts highlighted and risks assessed without any mitigation controls in place. The next step includes applying mitigation controls and a revised risk assessment, resulting in a revised risk ranking.

The assessment and findings of the assessment of the alternatives considered for the project are set out below in Figure 4.

Environment & Social - Risk Assessment Matrix



			Consequence						
		Environment	No environmental impact. 100 L spill contained within bund. No material to the environment.	Minor environmental impact rectified in-house <1 Month. 500L spill contained within secondary bund on-site. No material to the environment.	Significant environmental impact requiring outside assistance 1-6 months. Spill escapes bunding but contained in operational area – possible.	Major environmental impact requiring large scale outside assistance 6-12 months. Off-site environmental release with short- term effects (<1 week).	Major environmental impact with detrimental environmental effect Permanent or irreversible. Spill results in death of plants and animals, effects long-term and obvious.		
		Property/Production	No financial loss <r5k< th=""><th>Minor financial loss (Under R5,000 - R 50,000)</th><th>Moderate financial loss (R20,000 - R500,000)</th><th>Major financial loss (R500,000 - R2,,000,000)</th><th>Huge financial loss (Over R2,000,000)</th></r5k<>	Minor financial loss (Under R5,000 - R 50,000)	Moderate financial loss (R20,000 - R500,000)	Major financial loss (R500,000 - R2,,000,000)	Huge financial loss (Over R2,000,000)		
		Reputation	No community complaint or regulator issue	Community complaint but does not affect standing with community or regulator	Community complaint that does affect standing with community or regulator	Complaint that affect standing with community or regulator which may result in shutdown of <1 week	Complaint that affect standing with community or regulator which may result in shutdown of >1 week		
		1.	Minor	Medium	Serious	Major	Catastrophic		
	ls expected to occur in most circumstances (many times a day)	Almost Certain	Moderate (10)	High (15)	Critical (23)	Critical (24)	Critical (25)		
Likelihood	Will probably occur in most circumstances (several times a week)	Likely	Moderate (9)	High (14)	High (16)	Critical (22)	Critical (23)		
	Might occur at some time (several times a month)	Possible	Low (5)	Moderate (6)	High (13)	Critical (19)	Critical (20)		
	Could occur at some time (once a year)	Unlikely	Low (3)	Low (4)	Moderate (8)	High (12)	Critical (18)		
	May occur only in exceptional circumstances (once every ten years)	Rare	Low (1)	Low (2)	Moderate (7)	High (11)	High (17)		

FIGURE 4-ECC RISK MATRIX



	Hazard	Impact / Risk	Inherent Risk Assessment				Revised Risk Rank			
Task	Identified	(What can go wrong?)	Consequence	Likelihood	Result	Current Controls	Recommendations	Consequence	Likelihood	Result
Option 1. Proceed with the construction of the powerline and associated infrastructure	 > Creation of bare earth corridor > Effect on avifauna 	 Removal of protected species Collision of birds into powerline 	Medium	Unlikely	Low (4)	> Manager to conduct inspections to record any avian collision that may occur.	 > Follow the project-specific EMP that incorporates these control measures > Stringent and regular monitoring is recommended. 	Medium	Unlikely	Low (4)
Option 2. Do not proceed with the powerline	> No power supply to the trial plant	 > No trial operations > Loss of mining and employment opportunity > Economic loss > Investor confidence loss 	Serious	Possible	High (13)	 > Extend the existing powerline > Proceed with Option 1 	 > Disregard this option and continue with Option 1 due to the economic loss. 	Medium	Unlikely	Low (4)
Option 3. Alternative power generation sources	> Alternative renewable power plants, wind, solar etc.	 > Unreliable wind/solar energy supply > Not economically viable for trial plant 	Medium	Possible	Critical (20)	NA	 > Solar photovoltaic system (PV system) could be considered if life of mine has been established. > Do not proceed with alternative power generation sources due to risk 	Medium	Unlikely	Low (4)

TABLE 1 RISK ASSESSMENT OF ALTERNATIVES



-	Hazard	Impact / Risk					Revised Risk Rank			
Task	Identified	(What can go wrong?)	Consequence	Likelihood	Result	Current Controls	Recommendations	Consequence	Likelihood	Result
		> Financial loss for the business					and costs associated with each option at the feasibility stage > Disregard the option and continue with Option 1.			
Option 4. Alternative locations for the powerline (possible underground line)	 > Creation of new routes > Erosion 	 Potential killing of invertebrates and >Disruption of habitats 	Major	Likely	Critical (22)	 > Planned powerline site in terms of the mining plan site and approved site plan – Comply with the accessory works permit. > On ground investigation completed to determine less impact route. 	> Another site was identified however it meant creating new routes. The site determined is the most appropriate and has been addressed in this impact assessment.	Medium	Unlikely	Low (4)

Based on the mitigation measures and revised risk score, the following recommendation has been made.

Recommendation: Option 1 (Risk Result - Low 4) – Proceed with the (construction of powerline and associated infrastructure) proves to most suitable for the environment and community while offering energy supply to the trial processing plant.

Technically this option is viable due to the availability of the already existing substation; this reduces risk further due to operator continuity and integration.

Furthermore, its position in the landscape is considered to cause the least impact due to existing routes and infrastructure. The proposed route's greatest advantage lies in the fact that it occurs in an already disturbed landscape. Aesthetic impacts are minimised as it is not visible from any main road and is more nominally viable as compared to the other alternatives.

Option 1 (one) is the preferred option and therefore this option is addressed further in the EIA.



7 COMPLIANCE WITH LEGISLATION

7.1 LEGAL REQUIREMENTS

A thorough review of relevant legal legislation has been conducted for the proposed construction of the powerline and associated infrastructure. Table 4 identifies relevant legal requirements specific to the project.

TABLE 2 - LEGAL COMPLIANCE – PROJECT SPECIFIC									
ASPECT	LEGISLAT ION	RELEVANT PROVISIONS	RELEVANCE TO THE PROJECT						
The Constitution	Namibian Constitution First Amendment Act 34 of 1998	 Article 91 defines the function of the Ombudsman and 91 (c) describes the duty to investigate complaints concerning the over-utilisation of living natural resources, the irrational exploitation of non-renewable resources, the degradation, and destruction of the ecosystem and failure to protect the beauty and character of Namibia. Article 144 states that the general rules of international law and international agreements are binding to Namibia under the constitution and shall form part of the law of Namibia. The management and regulation of mining activities fall within the jurisdiction of the Ministry of Mines and Energy (MME), with environmental regulations guided and implemented by the Directorate of Environmental Affairs (DEA) within the Ministry of Environment and Tourism (MET). 	 The proponent holds the Mining Licences for the operations of the Uis tin mine project as regulated by the Ministry of Mines and Energy (MME): ML129, ML133, and ML134 						
Environmental Impact Assessment	Environmental Management Act, 2007 (Act No. 7 of 2007) and associated regulations, including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011	 The Environmental Management Act (EMA) (7 of 2007) has been compiled and is regulated by the Ministry of Environment and Tourism (MET). This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and the Environmental Impact Assessment Regulations. Environmental Management Act, 2007 (Government Gazette No. 4878) were promulgated on 6 February 2012. In terms of this legal framework, certain identified activities may not commence without an Environmental Clearance - a certificate that is issued by MET. This environmental clearance can only be 	 The certificate holder AfriTin Namibia (PTY) Ltd, on behalf of Nampower, requests for the construction of a 1 km powerline and associated infrastructure for the Uis tin mine site The proponent applies for an Environmental Clearance Certificate (by means of this scoping report to address potential impacts) accompanied by the prescribed form (Form 1) in terms of the Act. This Act and its regulations have informed and guided 						

TABLE 2 - LEGAL COMPLIANCE – PROJECT SPECIFIC



COMPLIANCE	AFRITIN MININ		
ASPECT	LEGISLAT ION	RELEVANT PROVISIONS	RELEVANCE TO THE PROJECT
		granted after consideration of an EIA.	 this assessment process. Impacts identified through this assessment application have been addressed throughout this report and project-specific EMP.
Archaeology	National Heritage Act 27 of 2004	 The Act provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects. It also makes provision for archaeological 'impact assessments. If applicable, the relevant permits must be obtained before disturbing or destroying a heritage site as set out in the Act. 	 Initial desktop assessment did not identify any areas of potential concern with regards to heritage.
Soil	Soil Conservation, 1969 (Act 76 of 1969) and the Soil Conservation Amendment Act (Act 38 of 1971)	 Makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil, vegetation and water supply sources and resources. The Minister of Agriculture, Water & Forestry may issue directives to landowners in respect of, amongst others: The prevention of erosion, the denudation, disturbance or drainage of land; and Any other disturbance of the soil which creates or may create conditions which cause or may cause any form of erosion or pollution of water by silt or drift sand. 	- Whilst minimum vegetation disturbance will occur on site during construction, there is potential to remove some and disturb soil. The construction methods and final design have been considered in the design of the planned project and thus considered the potential degradation of soil.
Health and Safety	Labour Act	 Empowers the Minister responsible for labour to publish regulations pertaining to health and safety of labourers. Detail requirements regarding minimum wage and working conditions 	 All contractors involved in the project are required to comply with this Act and its regulations. All contractors and employees working on the upgrade are required to comply with the site's Health and Safety Management System.



8 **RECEIVING ENVIRONMENT**

8.1 PROJECT ENVIRONMENT BACKGROUND

The proposed powerline and associated infrastructure are located within an already disturbed footprint. Therefore, specialist studies were not considered necessary because the proposed project has a low potential of additional disturbances, refer to figure 5.

A baseline survey was conducted on the 18th October 2018 by ECC and the proponent. A summary is provided below:

- The proponent provided an overview of the proposed project and a site walk-over and the surroundings was undertaken.
- The existing facilities were inspected including the nearby settlements, nearby roads, and old processing plant areas etc.
- ECC studied the site and surrounding environment, including walking along the site of the proposed powerline.
- Key observations included the location and proximity of residential properties to the site; vegetation on the site (sparsely distributed *Euphorbia* and *Acacia* specimens).
- Site visits were undertaken as part of the surveys and assessments:
 - 18th October 2018 Walked around the proposed site:
 - Checked vegetation and biodiversity
 - Viewed alternative site locations
 - Conducted a visual impact assessment
 - Assessed the aesthetics of poles, and
 - Confirmed the proposed location of the poles will not cause further environmental damages.
 - o 19th October 2018 ECC team reviewing data and information gathered from the site visits.



FIGURE 5 - SITE EXISTING INFRASTRUCTURE



8.2 CLIMATE

Temperatures can reach up to +/- 35° C in summer at Uis. The winter months, June July and August, are rainless and the average daytime temperatures range between $18 - 22^{\circ}$ C. Although rain was recorded from September to December, and even in April and May, rain is more frequent in January to March (Figure 6). In general terms, the climate of Uis can be described as hot and dry, with more than 300 sunshine days per year. Solar radiation ranges from 6.0-6.4 kWh/m2/day (see Figure 7). Winds of a north easterly and south westerly direction are predominant, with an average of approximately 1.6 knots (2.96 km/h) see Figure 8. This is mainly because of its proximity to the Atlantic Ocean and the Namib Desert.

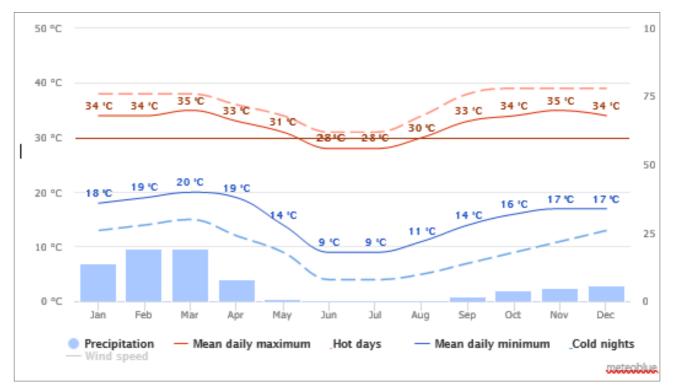


FIGURE 6 - AVERAGE TEMPERATURES AND PRECIPITATION AT UIS (SOURCE: METEOBLUE)



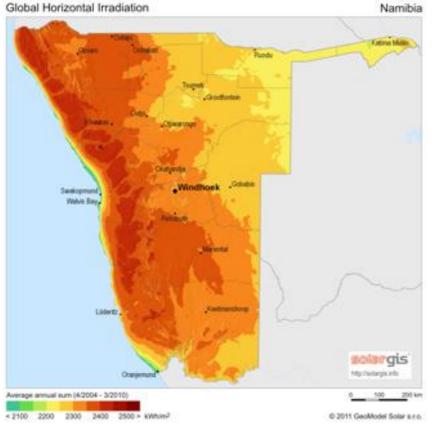


FIGURE 7 - SOLAR RADIATION NAMIBIA (SOURCE: ATLAS OF NAMIBIA)

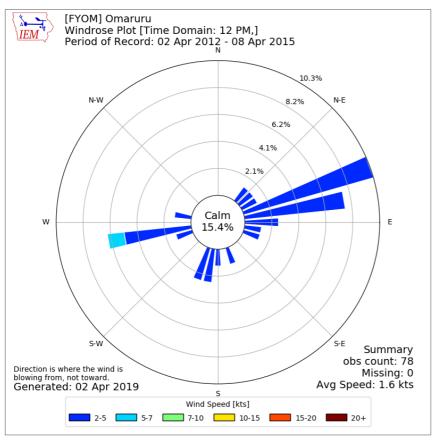


FIGURE 8 -WIND DIRECTION AND SPEED IN SURROUNDING AREA OF UIS



8.3 SURFACE WATER DRAINAGE AND TOPOGRAPHY

Us is approximately 800 m above sea level with the highest point at 900 m above sea level, as can be seen in Figure 9 (Composed from DTM data plotted with ArcMap from the Geological Survey Map series, Map Sheet 2114 – Omaruru, scale 1:1000000). The area is relatively flat, with steeper and higher relief areas confined to the northeast and south. The surface topography is characterized by extensive erosion on the hills and ridges. Regionally the area is drained by tributaries of the Omaruru and Ugab Rivers. Two sandy river courses, Uis 1 and Uis 11, transverse the mining area as well as the Uis Townlands.

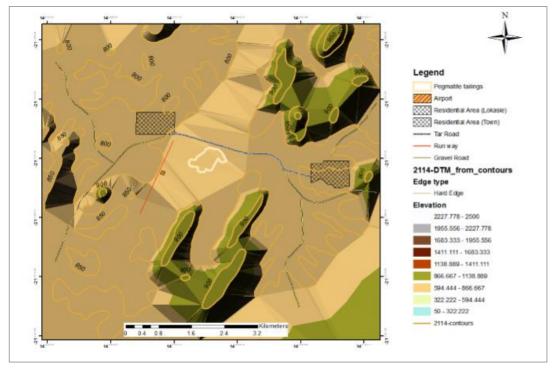


FIGURE 9 - TOPOGRAPHY OF THE UIS AREA.

Usi is located in proximity of the Brandberg (Figure 10), Namibia's highest mountain (2605 m above sea level). Not only is the Brandberg an interesting geological landscape, but it hosts also one of the densest concentrations of rock paintings in the world, including the iconic White Lady. Tourists that visit the area frequently overnight in Uis and its surroundings, providing important support to the local economy.



FIGURE 10 - BRANDBERG MOUNTAINS, UIS NAMIBIA



8.4 ECOLOGY – FLORA AND FAUNA

Regionally the vegetation on the barren and desolated plains of the Namib Desert is mostly restricted to the sandy beds of non-perennial drainage lines, which only flow only after substantial rainfall in their catchment areas further away. Although dry, these riverbeds often contain subsurface water at shallow depths throughout the year.

Around Uis, the landscape is more barren and rocky with very scanty vegetation. Grass cover only occurs after good local rain events. See Figure 11.



FIGURE 11 - VEGETATION COVER SURROUNDING UIS

8.5 REPTILE DIVERSITY

Seven reptile species are strictly endemic to area of the proposed site. Albert's burrowing skunk (*Sepsina alberti*) is a pale, green skink with a bright blue tail that is restricted to the northern part of the area. The Husab sand lizard (*Pedioplanis husabensis*), Namaqua spinytail lizard (*Cordylus namaquensis*), Campbell's spinytail lizard (*Cordylus campbelli*), Herero girdled lizard (*Cordylus pustulatus*), Brandberg thick-toed gecko and Albert's skink are species known to be found in the area.

8.6 AVIAN DIVERSITY

There are approximately 141-170 bird species may occur in the area around Uis. None of the approximately 40 species of birds in Namibia classified as extinct, critically endangered, endangered, vulnerable, near threatened, rare/peripheral have been recorded in the area, although red-listed/sensitive species including the Ludwig's Bustard and Kori Bustard, and various eagles are of likely occurrence.

8.7 ARCHAEOLOGICAL

A review of the National Heritage Council database was conducted, and no known heritage sites were identified in the project area



9 IMPACT ASSESSMENT METHODOLOGY

This section sets out the overall approach/ method that was adopted to assess the potential environmental and social impacts associated with the project. To fully understand the significance of each of the potential impacts, each impact must be evaluated and assessed.

9.1 ECC METHODOLOGY FOR THE IMPACT ASSESSMENT

Environmental Compliance Consultancy's methodology for environmental impact assessments is adopted and based on models for environmental and social impact assessments set out by the International Finance Corporation (IFC) principal 1 'Assessment and management of environmental and social risks and impacts. Furthermore, this impact assessment was undertaken for AfriTin in term of the Namibian legal requirements.

This impact assessment is a formal process in which the effects of certain types of development projects on the biophysical, social and economic environments are identified, assessed and reported so that the effects can be taken into account when considering whether to grant development consent or to provide financial support.

Final mitigation measures and recommendations are based on the cumulative experience of the consulting team and the client, taking into consideration the potential environmental and social impacts.

9.2 Assessment of Impacts

The significance of an impact was determined by taking into consideration the combination of the sensitivity and importance/value of environmental and social receptors that may be affected by the proposed project, the nature and characteristics of the impact, and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be direct or indirect; temporary/short term, long-term or permanent; and either beneficial or adverse.

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- The sensitivity and value of a receptor is determined by identifying how sensitive and vulnerable a receptor is to change, and the importance of the receptor (internationally, nationally, regionally and locally).
- The nature and characteristics of the impact is determined through consideration of the frequency, duration, reversibility and probability and the impact occurring.
- The magnitude of change measures the scale or extent of the change from the baseline condition, irrespective of the value. The magnitude of change may alter over time, therefore temporal variation is considered (short- term, medium-term; long-term, reversible, reversible or permanent)

ADLE 5 - ASSESSIVIENT CRITERION						
DURATION – WHAT IS THE LENGTH OF THE NEGATIVE IMPACT?						
None	No Effect					
Short	Less than one year					
Moderate	One to ten years					
Permanent Irreversible						
MAGNITUDE – WHAT IS THE EFFECT ON THE RESOURCE WITHIN THE STUDY AREA?						
None	No Effect					

TABLE 3 - ASSESSMENT CRITERION



Small	Affecting less than 1% of the resource							
Moderate	Affecting 1-10% of the resource							
Great	ecting greater than 10% of the resource							
SPATIAL EXTENT – WHAT IS THE SCALE OF THE IMPACT IN TERMS OF AREA, CONSIDERING CUMULATIVE								
IMPACTS AND INTERNATIONAL I	MPORTANCE?							
Local	In the immediate area of the impact							
Regional / National	Having large scale impacts							
International	Having international importance							
TYPE – WHAT IS THE IMPACT								
Direct	Caused by the project and occur simultaneously with project activities							
Indirect	Associated with the project and may occur at a later time or wider area							
Cumulative	Combined effects of the project with other existing /planned activities							
PROBABILITY								
Low	<25%							
Medium	25-75%							
High	>75%							

TABLE 4 - SIGNIFICANCE CLASS

CLASS	SIGNIFICANCE	DESCRIPTIONS
1		Impacts are expected to be permanent and non-reversible on a national
		scale and/or have international significance or result in a legislative non-
		compliance.
2	Moderate impact	Impacts are long term, but reversible and/or have regional significance.
3	Minor	Impacts are considered to be short term, reversible and/or localized in
		extent.
4	Insignificant	No impact is expected.
6	Positive	Impacts are beneficial



10 ASSESSMENT FINDINGS AND MITIGATION

This chapter presents the findings of the EIA for the proposed project as per the EIA process, scope and methodology set out in Chapter 9. A range of potential impacts have been identified that may arise as a result of the proposed project. The aim of this EIA report is to focus on the significant impacts that may arise as a result of the proposed project. A summary of the potential impacts and mitigation and/or control measures are discussed in Table 5.

For each potential significant or sensitive impact, a summary is provided which includes the activity that would cause an impact; the potential impacts; embedded or best practice mitigation; the sensitivity of receptor that would be impacted; the severity, duration and probability of impacts; the significance of impacts before mitigation and after mitigation measures are applied.



TABLE 5 - SUMMARY OF POTENTIAL IMPACTS

REFERENCE	VALUED ECOSYSTEM COMPONENT	ІМРАСТ	PROJECT PHASE	NATURE OF IMPACT	SIGNIFICANCE	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Fauna and Flora	Terrestrial ecology and biodiversity	Loss of habitat, or habitat destruction and clearing, or damage to vegetation Destruction of vertebrate fauna	Construction	Moderate Small Local Direct Medium 25 - 75%	Moderate	 Use existing tracks where possible Minimise the disturbance and removal of topsoil Identify and mark important tree species and clearly highlight to construction workers so that they are avoided Select site location to determine the shortest route in order to minimize earthworks and vegetation clearing Apply speed restrictions (< 30 km/h), and Avoid off-road driving. 	Minor
Avifauna	Terrestrial ecology and biodiversity	Disturbance due to construction Increase bird collision due to the powerline and associated infrastructure	Operations	Moderate Moderate Regional/National Direct Low <25%	High	 Using a combination of double loop Bird Flight Diverters (BFDs) and "flight diverter flags", these are fitted to the top conductor at 5-10 m intervals (alternating black and white) Mark and monitor sections to help provide more scientific confirmation of collision data (rates, sites and associated weather conditions) and thereby increase the future predictability of such occurrences as a basis for marking Earthing on wooden power line poles should stop 300 mm below the lowest phase to provide an "air space safety gap", in order to reduce electrocution risk (a procedure known as "gapping") Transformer/switchgear structures should be designed in such a way that they are not as attractive as bird perches/nesting sites. Selected live components should be insulated (e.g. using PVC piping or low- 	Minor



REFERENCE	VALUED ECOSYSTEM COMPONENT	ІМРАСТ	PROJECT PHASE	NATURE OF IMPACT	SIGNIFICANCE	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
						 density polyethylene pipe (LDPE). For more advice, NamPower can be contacted, and On strain structures where "jumper" wires are used in a horizontal configuration, the two outer jumpers should be suspended below the cross arm and the third/centre jumper should be insulated, or offset; or all jumpers insulated. Should bird electrocutions occur, safe alternative perching areas/platforms may be provided 	
Soil	Terrestrial ecology	Soil erosion	Construction	Moderate Small Local Direct Medium 25 - 75%	Moderate	 Under no circumstances should oil or other substances be disposed of on-site Ensure minimal vegetation clearance and exposure of soils through selecting the shortest route for access track construction and incorporating design elements which reduce the need for vegetation clearance In areas where the risk of erosion is evident, measures may be necessary to prevent erosion, and Minimise the disturbance and removal of topsoil. 	Minor



REFERENCE	VALUED ECOSYSTEM COMPONENT	ІМРАСТ	PROJECT PHASE	NATURE OF IMPACT	SIGNIFICANCE	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
Watercourses	Safety and environment	Leaks from chemical transformer oils. Loss of drainage lines	Construction and operations	Long Small Local Direct Medium 25 - 75%	Moderate	 Hazardous substances should be stored away from any water bodies Regular maintenance of vehicles, equipment and machinery Spilled oil should be treated as hazardous waste Drip trays for trucks to avoid oil leakages and to be used when refueling Protect the area from erosion due to stormwater drainage Collect and use stormwater whenever possible , and Spill containment apparatus must be kept on site to minimise the scale of impact should there be an accident. 	Minor
	Socio-economic activities	Vehicular movement and traffic	Construction	Short Small Local Direct Medium 25 - 75%	Moderate	Apply speed restrictions (< 30 km/h)	Minor
Social impact	Community health and safety	Visual impacts	Operations	Long Small Local	Insignificant		Insignificant



REFERENCE	VALUED ECOSYSTEM COMPONENT	ІМРАСТ	PROJECT PHASE	NATURE OF IMPACT	SIGNIFICANCE	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
				Direct Low <25%			
	Community health and safety	Waste (Litter)	Construction	Short Small Local Direct Medium 25 - 75%	Moderate	 Training and Toolbox Talks Good housekeeping across the site All working areas shall apply good housekeeping Marked bins should be provided across the site, and Littering by the construction workers shall not be allowed 	Minor
	Community health and safety	Generation of noise and dust	Construction and operations	Long Small Local Direct Medium 25 - 75%	Moderate	Working hours to be restricted to 07:00 to 17:00	Minor
	Community health and safety	Light pollution from security light at night	Operations	Long Small Local Direct Medium 25 - 75%	Moderate	Night-time light sources must be directed away from nearby communities	Minor
	Community health and safety	Health risk associated with the proximity of people to the substation	Construction and operations	Long Small Local Direct Medium 25 - 75%	Moderate	Any accidents or incidents should immediately be reported to the project manager. All incidents should be recorded in an incident register	Minor
	Community health and safety	Risk due to potential explosions at substation	Construction and operations	Short Moderate Local Direct Medium 25 - 75%	Moderate	Any accidents or incidents should immediately be reported to the project manager. All incidents should be recorded in an incident register	Minor
	Socio-economic activities	Temporary employment prospects in the area	Construction	Short Small Local Direct		 Maximise local employment and local business opportunities to promote and improve the local economy Enhance the use of local labour and local 	

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REFERENCE	VALUED ECOSYSTEM COMPONENT	ІМРАСТ	PROJECT PHASE	NATURE OF IMPACT	SIGNIFICANCE	IMPACT MANAGEMENT/CONTROL MEASURES	RESIDUAL IMPACT AFTER MITIGATION
				Medium 25 - 75%	Positive	 skills as far as reasonably possible Where the required skills do not occur locally, and where appropriate and applicable, ensure that relevant local individuals are trained, and Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible. 	Positive

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10.1 Additional Mitigation Measures

Having screened all potential impacts and having assessed those applicable to the criteria outlined in Section 9, a few points relevant to the impacts and corresponding mitigation measures are summarized below. Recommendations and mitigation measures show that the powerline has no major impacts despite the likely occurrences of some red listed bird species including the Ludwig's Bustard and Kori Bustard, and various eagles. Mitigation measures are suggested in the text below, should any concerns arise during the powerline and associated infrastructure monitoring in the future.

Avifauna:

Bird collisions on the power line -

- Using a combination of double loop Bird Flight Diverters (BFDs) and "flight diverter flags", these are fitted to the top conductor at 5-10 m intervals (alternating black and white).
- Mark and monitor sections to help provide more scientific confirmation of collision data (rates, sites, and associated weather conditions) and thereby increase the future predictability of such occurrences as a basis for marking.
- Future power lines should include bird avoidance measures (flappers/coils/anti-perching devices, etc.)
- Further mitigation measures to prevent electrocutions should also be incorporated: Earthing on wooden power line poles should stop 300 mm below the lowest phase to provide an "air space safety gap", in order to reduce electrocution risk (a procedure known as "gapping").
- Transformer/switchgear structures should be designed in such a way that they are not attractive as bird perches/nesting sites. Selected live components should be insulated (e.g. using PVC piping or low-density polyethylene pipe (LDPE). For more advice, NamPower can be contacted.
- On strain structures where "jumper" wires are used in a horizontal configuration, the two outer jumpers should be suspended below the cross arm and the third/centre jumper should be insulated, or offset; or all jumpers insulated. Should bird electrocutions occur, safe alternative perching areas/perching platforms may be provided.
- Should collisions still take place after mitigation, other methods should be considered. More stringent and regular monitoring is recommended.
- Mitigation should take place during the construction stage, rather than the operational stage; regular monitoring would be important during the operational stage.



11 RECOMMENDATIONS AND CONCLUSIONS

To some or other degree, all human-induced activities change, disrupt or are destructive, to the local fauna and flora of an area. Assessing potential impacts is occasionally obvious, but more often difficult to predict accurately. Predictions depend on the scope of the activity and are often based on a snapshot assessment. In this way, some impacts might be left out or are underestimated. Eventual outcomes may be different than originally predicted as a result. Consequently, continued monitoring of impacts during the operational phase(s) is imperative.

Overall, it is not expected that the proposed powerline and its associated infrastructure will adversely have any effect on the environment.

It is concluded that most of the impacts identified during this scoping assessment can be addressed through the recommended mitigation and management actions for both the construction and operation phases of the project. Should the recommendations included in this report and the EMP be implemented, the significance of the impacts can be reduced to reasonably acceptable standards and durations.

Based on the outcome of this impact assessment, **ECC** is of the **opinion** that the **proposed construction of the** powerline and associated infrastructure should be **authorised** as the project **benefits outweigh negative impacts** and the proposed project has a **sound motivation, demonstrating** the **need** and **desirability**, therefore.

12 NEXT STEPS

If approval is granted by MET for the construction of the powerline and associated infrastructure, the proponent will commence with the following steps:

- 1. Commence construction of the installation of poles and the construction of powerline.
- 2. Ensure maintenance and monitoring as the operation progresses.

Environmental Compliance Consultancy welcomes any further question relating to the proposed project.



APPENDIX A: NON-TECHNICAL SUMMARY





ECC-84-201-NTS-04-C

NON-TECHNICAL SUMMARY

CONSTRUCTION ACTIVITIES ON ML134

CONSTRUCTION OF A 1KM LONG, 66 KV POWERLINE THROUGH AN OFF TAKE AND ASSOCIATED INFRASTRUCTURE FROM THE EXISTING NAMPOWER SUBSTATION

PREPARED FOR

AFRITIN MINING NAMIBIA ON BEHALF OF NAMPOWER



MARCH 2019

PO BOX 91193 Windhoek Namibia Environmental Compliance Consultancy CC CC/2013/11404



NON-TECHNICAL SUMMARY CONSTRUCTION OF A 1KM LONG 66KV POWERLINE, THROUGH AN OFF-TAKE AND ASSOCIATED INFRASTRUCTURE FROM THE EXISTING NAMPOWER SUBSTATION ON ML134, ERONGO REGION, NAMIBIA

1 PURPOSE OF THIS DOCUMENT

The purpose of this Non-Technical Summary (NTS) is to provide Interested and Affected Parties (I&APs) a background to the proposed project and to invite I&APs to register as part of the Environmental Impact Assessment (EIA) process. The project involves the construction of a 1KM long, 66 KV powerline through an off-take and associated infrastructure from the existing Nampower substation on ML134. Through registering, all I&APs will be kept informed throughout the EIA process, and a platform for participation will be provided to submit comments/recommendations pertaining to the project.

This NTS includes the following information:

- What is the proposed project and where is the project located.
- Why the project is deemed necessary, what benefits or adverse impacts are anticipated
- What alternatives to the project have been considered and assessed.
- How the EIA process works
- The public participation process and how to become involved, and
- Next steps and the way forward.

2 DESCRIPTION OF PROPOSED PROJECT

2.1 BRIEF INTRODUCTION

Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Afritin Mining Namibia) on behalf of Nampower proponent to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) in terms of the Environmental Management Act No.7 2007 and its Regulations. An environmental clearance application will be submitted to the Ministry of Environment and Tourism (MET).

2.2 LOCATION

The Uis Tin Mine project is located in the Erongo Region, approximately 333km from Windhoek. The proposed powerline is located within the boundary of ML134 as indicated in figure 1 and 2 below.

2.3 WHAT IS PROPOSED

Uis Tin Mine is owned by the AfriTin Mining (Pty) Ltd that was established in 2017, and has a portfolio of tin assets in Namibia and South Africa. The Uis Tin Mine currently has no constant power supply to its trial processing plant, therefore necessitating network strengthening, which involves the establishment of a powerline, metering station and associated infrastructure. This is to ensure continual power supply to the trial processing plant.

2.4 CONSTRUCTION PHASE

The proposed construction phase will include lowimpact and non-intrusive activities. The following are envisaged during the proposed project:

- Staging area development
- Limited vegetation clearing
- Connection to the existing substation
- Installation of prefabricated standard substation components
- Minor ground preparation (trenches and levelling) of the site, for the installation of wooden poles
- Construction of bunds and oil holding area (for an emergency holding area for transformer oil in the event of a spill)
- Concrete casting; and
- Redirecting the existing lines to enter; and leave the new metering station.

2.5 OPERATIONAL PHASE

During normal operation, power transmission lines and associated infrastructure require very little intervention. Inspections will be frequently conducted by the site manager preferably on foot due to the small area of the powerline and its associated infrastructure.



The powerline and associated infrastructure will be maintained by Nampower to ensure the longevity of the infrastructure and secure current and potential future use.

2.6 DECOMMISSIONING PHASE

Should the proposed powerline and associated infrastructure no longer be required, the powerline and associated infrastructure would be decommissioned and removed. Alternatively, and with the agreement of stakeholders, the powerline and associated infrastructure could remain for beneficial use.

2.7 WHY IS THE PROJECT NEEDED

The proposed project is needed to supply constant power to Uis trail processing plant. In addition to this, providing an employment opportunity to the local populace through the construction and continuous maintenance of the structures.



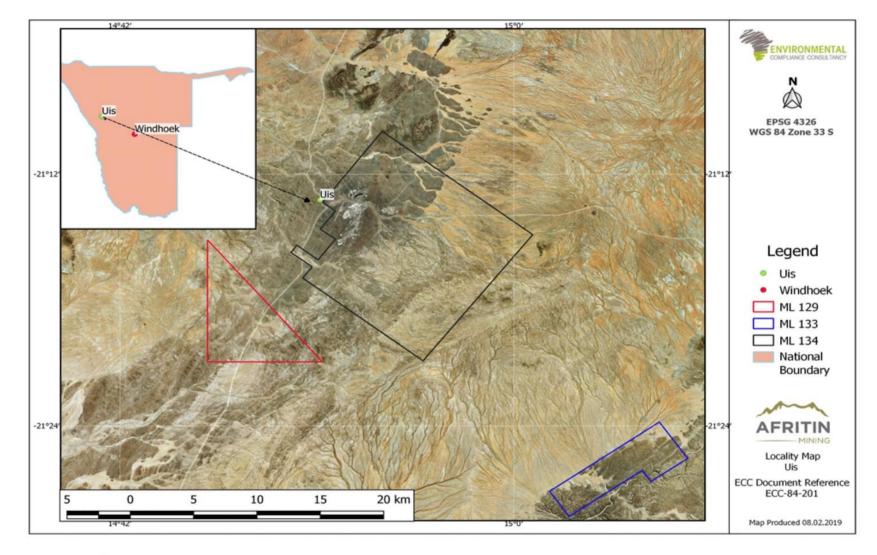


FIGURE 1 – LOCATION MAP OF THE PROPOSED PROJECT

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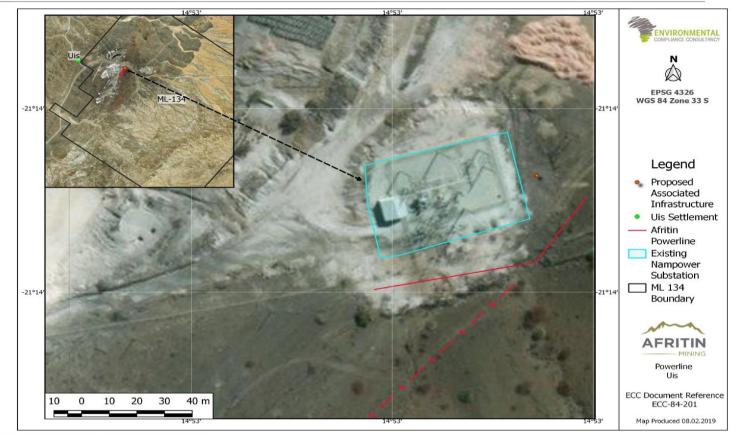


FIGURE 2 – LOCATION MAP OF THE PROPOSED POWERLINE

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2.8 POTENTIAL IMPACTS OF THE PROJECT

2.8.1 SOCIO-ECONOMIC

The potential social impacts are anticipated to be of low significance, and those that may transpire shall be confined within the ML site, these potential impacts may include the following:

- Minor risks of vehicular movement and traffic
- Generation of noise and dust
- Potential risk of light pollution from security lights at night
- Potential health risk associated with the proximity of people to powerline and associated infrastructure; and
- Risk due to potential incidents from standard operations of powerline.

2.8.2 ENVIRONMENTAL

The potential environmental impacts are anticipated to be of minor significance, and those that may occur shall be contained within the ML site, these potential impacts may include the following:

- Loss of habitat and damage to vegetation
- Moderate disturbance on avifauna the during operational phase
- Loss of unique flora and special habitats as a result of access road alternatives
- Potential leaks from chemical transformer oils, and
- Moderate risk of soil erosion.

3 CONSIDERATION OF ALTERNATIVES

Best practice environmental assessment methodology calls for consideration and assessment of alternatives to a proposed project.

In a project such as this, it is difficult to identify alternatives to satisfy the need of the proposed project; the activities shall be specific to the ML.

During the assessment, alternatives will take the form of a consideration of optimisation and efficiency to reduce potential effects e.g different types of technology or operations, route access and construction methods.

4 THE ENVIRONMENTAL ASSESSMENT PROCESS

This EIA, conducted by ECC, is undertaken in terms of the Environmental Management Act No. 7 of 2007 and

its regulations. The process followed in this EIA is set out in the flowchart in FIGURE 3 below.

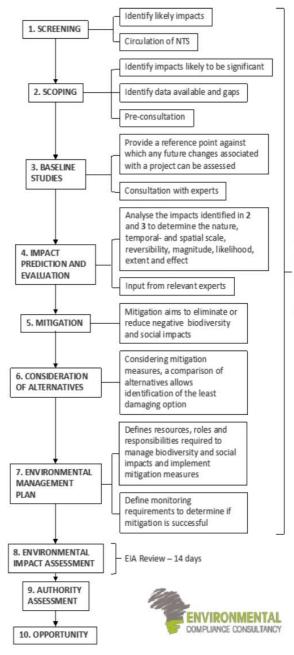


FIGURE 3 - FLOWCHART OF THE ENVIRONMENTAL ASSESSMENT PROCESS

4.1 SCREENING

A review of the proposed project screening findings against the listed activities was conducted; the findings of which are summarised below.



ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES

(1.b) The transmission and supply of electricity

• The proposed project will transmit and supply power to Uis trail processing plant

INFRASTRUCTURE

10.1 The construction of

(f) Cableways

 With this proposed project there is a potential construction of cableways for the transportation of construction materials

(g) Communication networks including towers, telecommunication and marine telecommunication lines and cables.

 With this proposed project there is a potential creation of communication networks which include towers, telecommunication lines and cables

The potential environmental and social effects are anticipated to be of minor significance, and those that may occur shall be contained on the ML site.

4.2 SCOPING

Due to the nature of the proposed project, and the implementation of the best practice mitigation measures during the construction, operational and decommissioning phase of the project, the effects on the environment and society are expected to be minimal and localised.

4.3 BASELINE STUDIES

For the proposed project, baseline information was obtained by a desk-based study and site verification processes through focusing on the environmental receptors that could be affected by the proposed project. ECC will also engage with stakeholders, I&APs and the proponents to seek input into the assessment.

4.4 IMPACT ASSESSMENT

Impacts will be assessed using the ECC EIA methodology. The EIA will be conducted in terms of the Environmental Management Act, 2007 and its regulations. ECCs methodology for impact assessments was developed using IFC standards in particular Performance Standard 1 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017), (International Finance Corporation, 2012) and Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008) including international and national best practice with over 25 years of combined EIA experience.

4.5 ENVIRONMENTAL MANAGEMENT PLAN

An EMP shall be developed for the proposed project setting out auditable management actions for Afritin Mining Namibia on behalf of Nampower to ensure careful and sustainable management measures are implemented for their activities in respect to the surrounding environment and community.

4.6 PUBLIC PARTICIPATION AND

Advertising

Public participation is an important part of the EIA process; it allows the public and other stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment, in addition it can aid the design process. This project is currently at the scoping phase and public participation phase.

At this phase ECC will perform the following:

- Identify key stakeholders, authorities, municipalities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Distribute the NTS for the proposed project (this document)
- Advertise the environmental application in two national newspapers
- Place notices on-site at or near the boundary
- If required host a public meeting to encourage stakeholder participation and engagement, and provide details of issues identified by the environmental practitioner, stakeholders and I&APs
- Record all comments of I&APs and present such comments, as well as responses provided by ECC, in the comments and responses report, which will be included in the scoping report that shall be submitted with the application, and

Circulate I&AP comments to the project team for consideration of project design.

Comments must be submitted via our website or in writing and can be emailed using the details in the contact us section below.



4.7 PLEASE CONTACT US

We welcome any enquiries regarding this document and its content. Please contact:

Environmental Compliance Consultancy (ECC)

info@eccenvironmental.com

Tel: +264 816 697 608

www.eccenvironmental.com

At ECC we make sure all information is easily accessible to the public.

Follow us online to be kept up to date:





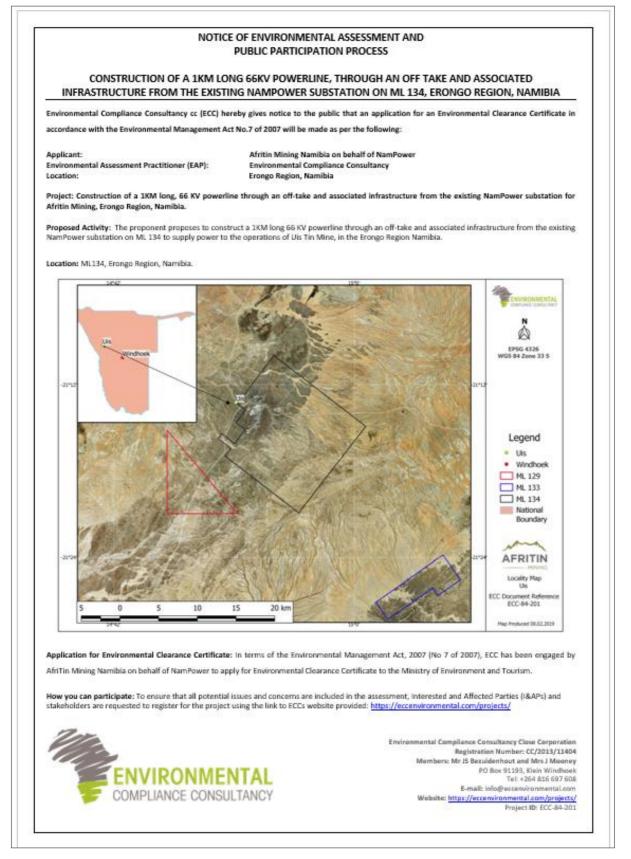
APPENDIX B: SITE NOTICES



FIGURE 12 – SITE NOTICE ON THE FENCE OF UIS TOWN COUNCIL



SITE NOITCE CONTENT





APPENDIX C: ADVERTS



THE NAMIBIAN

1

edsters to Wanderers

They are all fast, and we might lose They are an insix and we might lose a bit of pace. But we have a strong squad, and several of our former stal-warts like Moerne Blom, Iav van Wyk and Maetin Cronje will once again be available this year." he said. Rehoboth also have a new coach in former weitend wine head. Durit in former national wing back David Philander, while Reho Falcon will be coached by Ronaldo Pedro.



in good standing attended the "largest and most important gathering on the GFN calendar", which the NNOC and

NSC "deemed a great success". "The elections were free and fair. and all parties were happy with the outcome. The first priority of the newly elected executive will be to organise a workshop in order to review the GFN constitution to be in line with the current legal requirements, being the Sports Act and the consultation of the

International Gymnastics Federation," the observers said in a joint statement. Also on the new GFN Council are Meagan Bierbach (vice president – public relations), Wietsa Snyman (vice president – liaison), Djarnel Mcziane (section president – men's artistic gymnastics), Shariefa Mouton (section gymussics), shaneta Mouton (section president – women's artistic gymnas-tics), Leonic Botes (section president – rhythmic gymnastics), Vaughan Ahrens (section president – tampoline and tumbling), Marianne Bock (sec-tion president – aerobic gymnastics), Salara William (acerobic gymnastics) Selene William (secretary general), Vesselin Kostin (national technical director) and Nicolene Labuschagne (national medical director)

SPORT

WEDNESDAY 27 FEBRUARY 2019 31

FEELINGBLUE ... Chelsea's Cesar Azpilicueta (left) Jorginho (centre) and Eden Hazard are in a spot of bother and looking for amorale boosting result over Tottenham Hotspur tonight.

Nampa-Rectors



Sarri mess for Chelsea as Kepa row overshadows Spurs clash

STEVEN GRIEFITHS

LONDON - All eyes will be on the Chelsea team sheet at Stamford Bridge today to see whether the fall-out from Maurizio Sarri's astonishing row with Kepa Arrizabalaga drags on into the crucial London derby against Tot-

tenham Hotspur. Chelsea boss Sarri was furious when Blues Cheisea boss Sam was tutious when brues goalkeeper Kepa refused to be substituted after needing treatment in the closing stages of San-

needing treatment in the closing stages of Sam-day's League Cupfinal against Manchester City. Chelsecueventually lost 4-3 onpenalties after a gsalless draw, but that blow poledin comparison to the problems caused by Kepa's rebellious behaviour and Sarti's raging response on the Wembley touchline.

Sarri was already fighting to avoid the sack amid reports the Italian has lost the bucking of his players due to his stubborn tactics, dull training players due to his stubborn tactics, dull training methods and habit of publicly criticising them. Arrizabalaga was fined a week's wages and apologised for his actions, while Sarri blaned a "misunderstanding" and saidhe had had a' good conversation" with the goalkeeper. But the sight of Kepa staging a mutiny in the middle of Chelsea's biggest game of the season laid bare the problems Sarri has been struggling to resolve.

obe

to resolve. He tried to regain control of the situation by claiming the incident was caused by a delay in getting information from the team doctor about the extent of Kepa's injury. That hardly excused Kepa from such disre-spectful behaviour and few could have been convinced by the Spaniard's insistence his actions were misimterpreted because he had no intention of dischering. Suri

actons were misainerpreted because he had no intention of disobeying Sarri. Meanwhile, watching Sarri rip open his training top and storm down the turnel doring the Kepa row hardly inspired confidence that he has the composure required to merigate such a treacherous predicement predicament

He looks settoremain in charge for the Tottenham match at least

Now the question is whether Sarri will allow the 'keeper to retain his place in the team. ""What he has to do now is to make sure Kepa knows that he was in the wrong," former Chelsea star Pat Nevin said.

"That absolutely does weaken his position and make it look as if the player had more power than him."

Letting Kepa get away with such insubordination would be a huge gamble, even though BluesdefenderDavidLuizinsists Chelsea's stars still respect Sarri, "I'm sure if Kepa knew the coach wished to change him he

would have come off because he is a great proand the is a great boy and would respect Luiz said. c coach has the power over the group. He "We're in the hant for the Premier League. Luiz said. "The coach has the power over the group. He

as our respect." Sarri's team have lost four of their last seven ames, a poinful period that has seen his.

them drop to sixth in the Premier League, crash out of the FA Cup and lose the League Cup final. It is even more frustrating for Sarri

as Chelsea's dismal run started just after they showed signs of a revival by beating Tottenham in the League Cup semi-final. That rare success is a distant memory now and Sarri must hope the Wembley fausco can somehow trigger

a seige mentality in his team. With Chelsea already three points adrift of fourth place, another defeat could be the end for the Sarri era after

ss than a season. Meanwhile, Mike Dean has been removed from fourth official duties at the Bridge to avoid further conflict with Tottenham manager Mauricio Pochettino.

Pochettino marched across the pitch following Saturday's defeat at Burnley to confront Dean in a heated exchange that earned him an improper conduct charge from the Football Association. Pochettinowas seetling about key de-cisions that contributed to Tottenham's

first defeat in five league games. Tottenhamare six points behind lead-ers Liverpool, but the one bright spot was Harry Kane's goal-scoring return after six weeks out with an ankle injury.

We don't always want to be having to rear

we're still in the Champions League, so w in a good place." - Nampa-AFP

SPORT SCHEDULE

	Today
	Cricket - Momentum 1 Day Cup
	Lions v Titans 13h15
Ì	Cricket - ODI (4th)
Į	Windles v England 15h15
ł	Cricket - T20 (2nd)
1	India v Australia 15b15
-	English Premier League
E	Southampton v Falham 21h35
1	Arsenal v Bournemouth 21h35
1	Chelsea v Tottenham 21h50
E	Liverpool v Wattord 21h50
1	Palace v Man United
1	Man City v West Ham 21b55
ł	South African Premierahip
1	Sundowns v Cape Town City 19825
ł	Tennis - ATP500
1	Dubal Duty Free (D3) 12h00

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THE NAMIBIAN

ARTS & ENTERTAINMENT

WEDNESDAY 6 MARCH 2019 17

SCOPING REPORT AND EIA

AFRITIN MINING

Sir Bonzalo's 'The Village Boy'

CHARISSA BEUKES

SIR Bonzalo recently cleased his new album

"The Village Boy". Sadly, the project is mild at best. This may sound harsh but I don't think the album was wellthought-out and that is unfortunate, because the artist hasn't done enough win audiences over. He's able to flow with the beat and instrumentals with his witty lyrical ability, but even that needs a little work. Sir Bonzalo ontinues the repetition of lyrics, which displays a lack of creativity which can easily fatigue the

Instener, Track five, 'Ohango', the wedding song, stands out. Ittalks about how a wife's family believe that this celebration is a benefit to them, but actually it's the groom who gains. Track six – 'Muatje' featuring

timee - is a victim of an auto tune werload, which causes the efforts of he production team to fail the artist. Track seven 'Hallelujah' isn't te typical gospel song and is a bit

onfusing. It's an interesting choice to start



album alongside producers like DLH Production, Elvo and M-Jay, who feature on

individual tracks. This may have contributed to the incoherent nature of the project, which includes features by two artists, Himee and D-Kandjafa, though adding substance and an energetic flow to the songs they are on. "Kandjafa and I have

been working with each other for a long time now, since my first album. We dodiffer in style and work ethic but it definitely was a pleasure being able to team up with him again," said Sir Bonzalo. The blend of songs

shows a lack of style, but don'tbe dismayed. There is always a silverlining. On this album, it comes in the form of track four, 'Donkey *Liefde*', which is cheerful and fun to listen to

All in all, 'The Village Boy' is beautifully packaged in terms of cover art, with a picture of Sir Bonzalo sitting on a TV displaying

He added that the financing and narketing of the album were a strain the landscape of the north. Anyone who's a fan of under-ground local music is sure to find this album entertaining



a song with "these dudes is really

pissing me off", interspersed with singing 'hallelujah' on the chorus.

In an interview with The Namibian

Sir Bonzalo said the song was inspired by his arrest. It's at that

moment that he realised God was

the only one there for him, the

due to a shortage of resources.

DJ Mo-Fire worked on the

artist said

A send-off for Madea

MARTHA MUKAIWA

TYLER Perry's foul-mouthed natriarch is alive and well in 'A Madea Family Funeral' (2019). Billed as the last instalment of Bined as the tast instantent of the Madea franchise, the 10th film is once again written, directed and produced by Perry who stars in multiple roles. Blending the drama of a family

reunion, the pain of a funeral and the scandal of an X-rated death for this cinematic *soyonara*. 'A Madea family Funeral' is the talky, wise-racking, over-the-top comedy

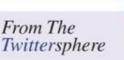
Perry has built an empire on but with a side order of sermonising about infidelity, law enforcement

and sacrifice. Incorporating old favourites, new jheri curls and some Telemundo-worthy family drama, the film runs a little long, feels a little phoned in and is a little less of a send-off than Madea deserves. Strictly for fans, see this if you

wantto pay your respects to Perry's grey-haired, ass-whooping elder. martha@namibian.com.na. Martha Mukaiwa on Twitter and Instagram; marthamukaiwa.com

WIN, WIN, WIN!

Want to watch 'A Madea Family Funeral' (2019) or a movie of your choice at Sten-Kinekor? Win a movie ticket by simply answering a question: How many Madea movies has Tyler Perry made! Send your full name and your answer via SMS to 45045. using the keyword MOVIE. Competition closes Friday at 17h00.



NAS once famously said: "All I need is one mic." If you've been scrolling down the TL this week, you'd know exactly where context this falls into. Think 'Lion King'. Nonetheless, as haters continue to Nonchreises, as naters continue to hate and tweeps continue to debate, we've gathered some tweets for Wednesday's woes as we continue to push on "to freedom!"

Just For Laughs @she_gatsby: Why do wisdom teeth have to be so dramatic? @2ShadesofJoy: Good conver-sations will have you saying bye

sations will nave you saying by but still being there two hours later since you said bye. *Gusserfect:* At the gym, I said subscription instead of member-ship and the girl replied with "lol, this isn't a pharmacy".

"lol, this isn't a pharmacy". B*tch, that's a prescription, we're both stupid. @thbtconture: You don't gotta be built like an IG model to be happy. God shaped me like a Fig Newton yet still 1 rise. @SugaryOblivion: My mon's idea of a sufficiently clean house in own which looks like it has

is one which looks like it has never been lived in... Ever.

Food For Thought

Food For Thought @Homa10i: Retirement age is 60. If this age limit was applied to Parliament, how many MPs would we have left?

@CallMcTuha: Isn't there a restart button in this life thing where one can just press it to

where one can just press it to start over and re-do all the wrongs and turn them to rights? @xThami_Nyawo: There are two types of tired. One that requires sleep and one that re-

quires peace. *Cheavybagofbones:* You're still an artist if you don't release your work. You're still a writer if you

work. You're still a writer if you don't publish a piece. Art is still art, even in private. @viet_t_nguyen: Writers from a minority, write as if you are the majority. Do not explain. Do not cater. Do not translate. Do not apologise. Assume everyone knowe what you are talking. knows what you are talking about, as the majority does. Write with all the privileges of



@thebacardiij: When you use "fur

the majority, but with the humility of a minority. @MsKelao21: A former su-

@MsKelao21: A former su-pervisor once hit my burn with a book. Gave him a piece of my mind and we hated each other ever since. Today, he's in the papers for sexually harassing someone else. Some of you bozo are annoyed by hashtags but men being trach it the reality we men being trash is the reality we live in.

Overheard

@IDively/sGirk: Y'all boo'd up or single? <<< RT @Devinchy_: Fed up. @RoyatKenyah: Dating is a west of time. <<< RT @Kasikåli_:

But single people have no direction.

00n. @rodri_vh: Intelligent girls >>> RT @Taiyewo__: Thoughtiana.

@IGN: 'Avengers: Endgame' could be the longest Marvel movie ever. <<< RT @Nonye-Biko: I did seven hours in labour.

Marvel me. @glocknina: What collabs NEED to happen in 2019? <<< RT @KyleEdwards: Children and vaccines

@_Zanie: Struggling to get out of bed. <<< RT @MprueDie: I know a pastor who can wake you

up... @2ChainlezChainz: How do people stay with phones that have cracked screens? <<< RT @Uerikorovi: We have cracked lives, what's a cracked screen?

Compiled by Netumbo Nekomba from twitter.com; follow me on @MickeyNekomba



ECC-84-201-REP-15-D



The following was advertised in the Informante on the 7th and 14th of March (available online).







APPENDIX D: EVIDENCE OF PUBLIC CONSULTATION

Registered Interested And Affected Parties

FIR	ST LAS	COMPANY/ORGANISATION	NATURE OF COMPANY OR ORGAISATION	EMAIL ADRESS	TELEPHONE NO.	COMMENTS	COMMENTS
Pierre	Both	a Geo Pollution Technologies (Pty) Ltd	Consultancy			<u>1st round comments</u> Please register me as an I&AP	Response: Registered I&AP
Mike Ann	& Scot	t	Bird specialists			<u>1st round comments</u> Please register me as an I&AP	Response: Registered I&AP



APPENDIX E: STAKEHOLDER MAP

Stakeholder Map - For Afritin Mining Namibia on Behalf of NamPower on ML 134															
Stakeholder Type	Farm Name	Deed ID Number	Area (ha)	Title	Surname	First Name	Company	Address	Interest/H o v stakehold er is affected	Potential Influence on Project	Involve.	Methods of Engagem ent	Engagement Schedule	Email	Phone
Directly Affected	UIS TOWNLANDS	FMC/00215/00RE M	821.2	NA	NA	NA	UIS TOWN COUNCIL	No records	Land Owner	Social Licence to operate, influence	Involve/Empow er	Newsletter, meetings,	Daily when operating on their		
Directly Affected	OKAMBAHE RESERVE	FMC/00139	438937.9/ 0	NA	NA	NA	GOV OF NAMIBIA	No records	Land Owner	Social Licence to operate, influence operating	Involve/Empow er	Newsletter, meetings, door knock,	Daily when operating on their land		
Authorities (National)	Government of Namibia	NA	NA	NA	NA	NA	MINISTRY OF ENVIRONMENT AND	P/Bag 13306 Windhoek	Licencing authority	Licence approval/disapprov	Inform/Consult	Various	Annual or as required		+264 61 284 2111
Authorities (National)	Government of Namibia	NA	NA	NA	NA	NA	MINISTRY OF MINES AND ENERGY	P/Bag 1909 Stadtmitte	Licencing authority	Licence approval/disapprov	Inform/Consult	Various	Annual or as required	info@mme.gov.na or Patrick Elungu@mme.gov	+264 403633
Authorities (Regional)	Government of Namibia	NA	NA	NA	NA	NA	ERONGO REGIONAL COUNCIL		Licencing	Licence approval/disapprov	Inform/Consult	Various	Annual or as required		
Authorities (National)	Government of Namibia	NA	NA	NA	NA	NA	NAMPOVER NAMIBIA	P.O.Box 2864 Windhoek	Licencing	Licence approval/disapprov	Inform/Consult	Various	Annual or as required	webinfo@nampower.co m.na	061 205 4111



APPENDIX F: ECC CVS

PRACTITIONFR



Stephan Bezuidenhout

ENVIRONMENTAL COMPLIANCE CONSULTANCY

Hello! :)



ABOUT ME

Name

Born

Jacobus Stephan Bezuidenhout - But you can call me Stephan -



Current

11 April 1989

Phone +264 81 262 7872

Email stephan@eccenvironmental.com

Website www.eccenvironmental.com

Contact me!

How to reach me!



South Africa 2008 Additional Qualifications:

Publications:

University of Stellenbosch

University of Pretoria South Africa 2012

Education & Qualifications

Postgraduate Degree in Environmental Management & Analysis

Bachelors in Applied Science

- Snake Bite and Snake Handling
- Level 1 & 2 First Aid
- Industrial Environmental Compliance

N.S., et al., Some ecological side-effects of chemical and physical bush clearing in a southern African rangeland ecosystem, Southern African Journal of Botany (2015), http://dx.doi.org/10.1016/j.sajb.2015.07.012

The FSC National Forest Stewardship Standard of Namibia (Draft V 4). Co-authored by S Bezuidenhout, P Cunningham, A Ashby, F Detering, W Enslin & D Honsbein

Experience & Work History

Managing Director

Since 2012, Stephan has been working as an environmental assessment practitioner. Stephan has a strong ecological background and has gained more than seven years experience in the environmental industry. As a lead practitioner, Stephan has successfully driven environmental impact assessments and compliance assessments within Southern Africa. His hands on and practical experience and knowledge of international standards, such as IFC and World Bank standards allows Stephan to advise his clients and teams constructively and effectively.

ENVIRONMENTAL CONSULTANT & PRACTITIONER

Stephan manages a dynamic team of environmental practitioners and graduates at Environmental Compliance Consultancy. The firms' core objective is to improve the national standard of environmental compliance by developing local capacity. To date Stephan and his team have successfully completed over 30 projects for various industries, including mining, energy, infrastructure, conservation and tourism.

MAY 2019

ECC-84-201-REP-15-D





Stephan Bezuidenhout

Managing Director +264 81 262 7872

References

Feel free to ask the boss :)

SALOME BEESLAAR Environmental Practitioner Pr.Sci.Nat: 400385/14

> ESCA COETZEE Environmental Scientist Sasol Technology

PHIL BARKER Pipeline Construction Superintendent Worley Parsons Or ask those who have worked for me?

> Michael Moreland Environmental Scientist CSP Solar Energy Projects

Professional

Associations

- South African Institute of Ecologists and Environmental Scientists (SAIE&ES)
- Environmental Assessment Practitioners Association of Namibia (EAPAN#172).
- Member of FSC Environmental Chamber
- Executive Committee Member of Namibian Chamber of Environment

Fun Facts:

- Keen fisherman
- Passionate Hunter & Conservationist
- 21ft vessel certified skipper
- Summated Kilimanjaro
- Have survived scorpion stings and snakebites!
- Did I mention I love camping?
- Words I live by:

'Do what makes you happy the rest will follow'

Experience & Work History

Over the past two years he has mentored over eight interns (of which most still work closely with him) building their careers in environmental management, conservation and rangeland management.

Examples of projects successfully completed include:

- Abengoa Solar SA Paulputs CSP (Pty) Ltd. 150 MW CSP Tower Environmental Assessment Practitioner during EIA Process
 - Northern Cape Province, South Africa
- Abengoa Solar SA, Xina Solar One (200 MW) CSP
 Trough Environmental Control Officer during construction
 phase. Northern Cape Province, South Africa
- Abengoa Solar SA, Khi Solar One (50 MW) CSP Tower.
 Environmental Control Officer during commissioning and rehabilitation phases. Northern Cape Province, South Africa for Abengoa Solar
- Isondlo Project Support (IPS) (Pty) Ltd. Soil Remediation and commissioning report of NGALA Camp. Gauteng, South Africa
- Berekisanang Empowerment Farm. Annual external Water Use Licence audit and 70 hectare agricultural development. Northern Cape, South Africa.

Environmental Coordinator ROMPCO PIPELINE – Worley Parsons Mozambigue and South Africa

Stephan was employed by the Procurement, Management and Construction (PMC) consultant, Worley Parsons to manage the environmental aspects of the proposed linear development. Stephan managed a team of 12 positions for the duration of the project ensuring compliance of National and best practice such as IFC standards.





ABOUT ME

Jessica Mooney

24 October 1984

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Jessica@eccenvironmental.co

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Jessica.mooney7

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Jessica Mooney

Name

Born

Phone

Email

Website

m

Hello! :)

Jessica Mooney

Environment & Safety Specialist

Education &



Federation University Australia

2003-2006

Bachelor of Applied Science -Environmental Management

Additional Qualifications Management Systems Leadership ICAM - Incident Cause Analysis Method Certificate II in Metalliferous Mining core safety and risk management Certificate III in Mine Emergency Response & Rescue Level 3 – HLTFA402B Apply Advanced first Aid Emergency Rope Rescue Level 2 - 21593VIC First Aid level 2 Bonded Asbestos Removal >10m2 Leading and Managing People – Brisbane North Institute of TAFE



Experience & Work History

Environment and Safety Specialist

Environmental Compliance Consultancy Providing professional consulting services to clients in Namibia with particular focus on approvals, ECCs, reporting and compliance.

- ECC Approvals
- Mine Closure Plans
- Rehabilitation
- Pipeline projects
- Cultural Change programmes
- IMS (ISO14001 and 18001)

Group HSE Manager

Weatherly Mining Namibia

An exciting role covering the breadth of two operational underground mines (Otjihase and Matchless) and the construction of a new open pit mine (Tschudi) working for Weatherly Mining in Namibia, Africa.

- Managed company's SHEQ portfolio
- Full scale construction of new greenfield mine into operational copper mine
- Reduced LTIFR by 90% from 23.1 to 2.4 in 22 months!
- Implemented integrated management system
- Approvals, ECC renewals and EMPs
- Established the first mining environmental forums in Namibia
- Implemented SAFE COPPER cultural change programme

MAY 2019





References

Feel free to ask the boss :)

MR CRAIG THOMAS

Managing Director Weatherly Mining

MR COLIN BULLEN

Managing Director Imerys (client)

Group Manager Lihir Gold MR NICK CURREY Director at Sustainable Mining Strategies

Or ask those who have worked for me?

Ms Asteria Salmon Worked as Control Room Operator WMN

> Mr. Hermanus Lamprecht Paramedic Safety Officer

Professional

Associations

- Chamber of Mines Namibia
- Women on Boards
- The Chamber of Minerals and Energy of Western Australia Industry Member – Mining, Minerals and Resources

Fun Facts:

- I can deadlift 135kg
- To keep fit I Olympic weight lift
- I run ultra Marathons & the longest run yet the fish river Canyon 65km
- I am one of 6 children do you think that means 4 of us suffer middle child syndrome?

Words I live by:

'The journey will bring you happiest, not the destination'

Jessica Mooney

Environment & Safety Specialist

Experience & Work History

Environmental Consultant

Ensolve Pty Ltd - Australia

In February 2013 an opportunity came about to launch my own business, Blue Wren Environmental Services.

During this time I have worked alongside Ensolve Pty Ltd to deliver several environmental projects including:

- A mine closure project taking an operating mine site into the rehabilitation and closure phase. This project involved the full development of a mine closure plan, facilitation of the government approvals, stakeholder engagement and technical environmental studies to inform the mine closure plan
- Sustainability reporting in accordance with the Global Reporting Initiative
- Rehabilitation of historic exploration sites and obtaining associated government approvals for relinquishment of bonds.

Site Environmental Manager

Panoramic Resources - Australia

- Brought the site into full compliance with the Environmental Licence within 1 year.
- Managed projects relating to the expansions of the current mine tailings dams including obtaining approvals under the Mining Act 1978 and Environmental Protection Act 1986.
- Managed the environmental and community aspects of three operations; Savannah Nickel Mine, Copernicus Nickel Mine (currently in care and maintenance) and the operations at Wyndham Port
- Responsible for the environment, sustainability and social reporting portfolio
- Developed productive working relationships with local government environmental agencies and non-government agencies, which assisted with the approvals process.
- Developed strategies for the recruitment and retention of local Indigenous personnel

Environmental Systems Coordinator

Lihir Gold Limited - Australia

Working on site to provide technical environmental and community advice to ensure all regulatory and licence obligations were met or exceeded

- Regulatory Approvals (State and Federal Government)
- Environment and social aspects of the international cyanide management code
- Operational budgeting and bond management for mine closure
- Compliance with the legislative framework
- Community engagement





Emerita Lyapaka Ashipala **Environmental Graduate**

Hello! :)





Glasgow Caledonian University, UK 2017 - 2018

University of Namibia 2013 - 2016

Education & Qualifications

Master's Degree in Environmental Management (Oil & Gas) (Distinction)

Bachelors in Environmental Biology



Experience & Work History

ABOUT ME

Name Emerita Lyapaka Ashipala

> Born 15 February 1994

> Phone +264 81 701 6851

Email

emerita@eccenvironmental.co m

Website www.eccenvironmental.com



Environmental Graduate

Current

Working with Environmental Compliance Consultancy Providing professional consulting services to clients in Namibia with particular focus on:

- Drafting EIA adverts and NTS documents
- Assisting in the development of scoping reports and
- Environmental Management Plans for exploration projects

Intern

Community-Based Natural Resource Management (CBNRM) Project, GIZ Namibia

Roles and Responsibilities:

- Managed a high-volume workload within a deadlinedriven environment.
- Responsible for weekly press review.
- Compilation and analyses of data collected from field for baseline study of projects.
- Assists in project management activities.
- Ensure work ethics is compliant with approved codes and standards.
- Even/workshop assistance planner.
- Engaged in clients and stakeholders' meetings.
- Provides overall project management support throughout the entire life cycle of projects.

Team Leader (Ad hoc Registration Official)

Electoral Commission of Namibia Roles and Responsibilities:

- Kit operator
- Printing of registration cards
- Responsible for keeping order and safe guarding of all equipment





Emerita Lyapaka Ashipala

Environmental Graduate

References

Feel free to ask the boss :)

JESSICA MOONEY Environment & Safety Specialist

STEPHAN BEZUIDENHOUT Managing Director

Or ask those who have worked with me?

Prof Jim Baird Programme Leader Glasgow Caledonian University j.baird@gcu.ac.uk

Fun Facts:

- I am an adventurous
- Passionate on learning more about Oil and Gas

Words I live by:

"Be willing to go all out, in pursuit of your dream. Ultimately it will pay off. You are more powerful than you think you are."

Experience & Work History

Undergraduate Internship

South African Science Of Climate Change and Adaptive Land Management (SASCCAL), Namibia *Role and Responsibilities:*

- Compilation of news in all regions, for newsletter publication
- Using qGIS to digitise map drawings
- Organising various task research portfolios