



ECC DOCUMENT CONTROL: ECC-88-189-REP-05-D

## **ENVIRONMENTAL SCOPING REPORT**

Exploration Activities on EPL 6927  
For Base and Rare Metals, Industrial Minerals and  
Precious Metals.  
Otjozondjupa Region

PREPARED FOR



MARCH 2019

## TITLE AND APPROVAL PAGE

<b>Project Name:</b>	Exploration Activities on EPL 6927 For Base and Rare Metals, Industrial Minerals and Precious Metals, Otjozondjupa
<b>Project Number:</b>	ECC-88-189-REP-05-D
<b>Client Name:</b>	Votorantim Metals Namibia (Pty) Ltd
<b>Ministry Reference:</b>	NA
<b>Status of Report:</b>	Public Review
<b>Date of issue:</b>	25 March 2019
<b>Review Period</b>	26 <sup>th</sup> March – 2 <sup>nd</sup> April 2019

### Environmental Compliance Consultancy Contact Details:

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

#### Stephan Bezuidenhout

Environmental Compliance Consultancy  
Office: +264 81 669 7608  
Email: [stephan@eccenvironmental.com](mailto:stephan@eccenvironmental.com)

#### Jessica Mooney

Environmental Compliance Consultancy  
Office: +264 81 669 7608  
Email: [jessica@eccenvironmental.com](mailto:jessica@eccenvironmental.com)

### Confidentiality

Environmental Compliance Consultancy Notice: This document is confidential. If you are not the intended recipient, you must not disclose or use the information contained in it. If you have received this document in error, please notify us immediately by return email and delete the document and any attachments. Any personal views or opinions expressed by the writer may not necessarily reflect the views or opinions of Environmental Compliance Consultancy.

## EXECUTIVE SUMMARY

Votorantim Metals Namibia (Pty) Ltd propose to undertake exploration activities on Exclusive Prospecting Licence (EPL) 6927 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region (referred to as the proposed project from herein). EPL 6927 is located in the Otjozondjupa Region, east of Otavi.

The proposed project triggers listed activities in terms of the Environmental Management Act, 2007 (Act No. 7 of 2007), therefore an Environmental Clearance Certificate is required. As part of the Environmental Clearance Certificate application, an environmental impact assessment has been undertaken to satisfy the requirements of the Environmental Management Act, 2007. This Environmental Scoping Report and Environmental Management Plan (EMP) shall be submitted as part of the application for the Environmental Clearance Certificate.

The proposed project will entail exploration methods on EPL 6927, which includes soil and rock sampling, geological mapping, electromagnetic and geophysical surveys, drilling and core sampling. Some vegetation may be cleared to allow access tracks and working areas to be created and for the installation and development of exploration drill holes. The duration of exploration activities is anticipated to be conducted over the course of a 3 year period (duration of the mineral licence) and the periods of each exploration programme will vary and will be refined as geological information becomes available. In the event that exploration is successful, and a mineral resource can be defined with commercially viable concentrations, exploration operations can potentially transcend into mining operations that would be assessed as a separate and detailed environmental impact assessment stage.

EPL 6927 is in the Acacia Tree-and-Shrub Savanna biome and has Karstveld and Thornbush Shrubland vegetation types. The area supports a 'medium-high' terrestrial diversity of animal and plant life compared to the rest of Namibia. The plant diversity in the area has between 400 – 499 species due to the area receiving higher rainfall than other areas in Namibia. EPL 6927 covers 14 farm boundaries where the 'land use' is predominantly irrigated cultivation and large and small livestock farming.

This environmental and social impact assessment was undertaken using a methodology developed by Environmental Compliance Consultancy (ECC), which is based on the International Finance Corporation (IFC) standard for impact assessments. Through the scoping process, a review of the site and surrounding environment was completed by undertaking a desktop review and field assessments. Limited sensitive receptors were identified during this phase, the only potential environmental risks that may require further investigation was surrounding the increase in noise levels and subsequent effects on human receptors.

Through further investigation, it was determined that the effects from noise is considered to be of minor significance, however with additional mitigation, the significance is reduced to low. The additional mitigation measures include:

- No hammering of drill rods with steel hammers when in proximity of houses
- Noise suppression measures shall be applied if drilling occurs in locations that may affect residents
- Residents shall be provided at least two weeks' notice of drilling operations within 1km of their property, and
- Continual engagement with residents shall be undertaken by the proponent to identify any concerns or issues, and appropriate mitigation and management measures shall be further agreed.

The potential effect is therefore not considered significant as it does not widely exceed recognised levels of acceptable change; does not threaten the integrity of the receptors; nor is it material to the decision making. The assessment is considered to be comprehensive and sufficient to identify impacts, and it is concluded that no further assessment is required. On this basis, it is of the opinion of ECC that an environmental clearance certificate could be issued, on conditions that the management and mitigation measures specified in the EMP are implemented and adhered to.

**Contents**

**1 Introduction ..... 6**

1.1. Background to the Proposed Project ..... 6

1.2. Environmental Requirements ..... 7

1.3. Purpose of this Report ..... 7

1.4. The Proponent of the Proposed Project ..... 8

1.5. Environmental Consultancy ..... 8

1.6. Report Structure..... 9

**2 Regulatory Framework ..... 10**

**3 Project Description ..... 14**

3.3.1 Proposed exploration activities..... 14

3.3.2 Exploration schedule ..... 15

3.3.3 Equipment and material..... 15

3.3.4 Workers and accommodation ..... 15

3.3.5 Resource use and waste management ..... 16

3.4 Rehabilitation ..... 16

3.5 Limitations, Uncertainties and Assumptions..... 16

**4 Baseline environment..... 17**

4.1 Site and Surrounding Environment ..... 17

**5 Environmental Impact Assessment ..... 19**

5.1. Purpose of the environmental impact assessment..... 19

5.2. The Assessment Process ..... 19

5.2.1. Screening of the proposed project..... 20

5.2.2. Scoping of the environmental assessment ..... 20

5.2.2.1. Baseline studies..... 20

5.2.2.2. Impact prediction and evaluation ..... 20

5.3. Consultation ..... 20

5.3.1. Newspaper advertisements ..... 20

5.3.2. Non-technical summary ..... 21

5.3.3. Site notices ..... 21

5.3.4. Consultation feedback ..... 21

5.4. Environmental assessment Findings ..... 21

5.4.1. Scoping assessment findings..... 21

5.4.2. Further consideration: noise levels .....	25
5.5. Environmental Management Plan .....	25
<b>6 Conclusions .....</b>	<b>27</b>
7 References.....	28

**TABLES**

TABLE 1 - PROPONENT DETAILS .....	8
TABLE 2 – ENVIRONMENTAL SCOPING REPORT SECTIONS.....	9
TABLE 3 – LEGAL COMPLIANCE .....	10
TABLE 4 – LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS.....	16
TABLE 5 – SCOPING ASSESSMENT FINDINGS .....	22
TABLE 6 – SUMMARY OF EFFECTS .....	25

**FIGURES**

FIGURE 1 - LOCALITY MAP EPL 6927 .....	6
FIGURE 2 - FARM BOUNDARIES WITHIN EPL 6927 .....	17
FIGURE 3 – EIA SCOPING PROCESS .....	19

**DEFINITIONS AND ABBREVIATIONS**

DEA	Directorate of Environmental Affairs
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence
IFC	International Finance Cooperation
I&AP	Interested and affected parties
MET	Ministry of Environment and Tourism
MME	Ministry of Mines and Energy
MPMRAC	Minerals (Prospecting and Mining Rights) Committee

# 1 INTRODUCTION

## 1.1. BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its Regulations. An environmental clearance application will be submitted to the relevant competent authorities: the Ministry of Mines and Energy (MME) and the Ministry of Environment and Tourism (MET).

Nexa Resources is an investment company of the Votorantim portfolio; the company is listed on the New York Stock Exchange in the United States and the Toronto Stock Exchange in Canada. Votorantim undertakes mineral exploration in Namibia and proposes to undertake low impact exploration activities on EPL 6927 for base and rare metals, industrial minerals and precious metals in the Otjozondjupa Region.

The project is located in the Otjozondjupa region. The site is located approximately 25-30 km from Otavi and 12.4 km from Kombat see FIGURE 1.

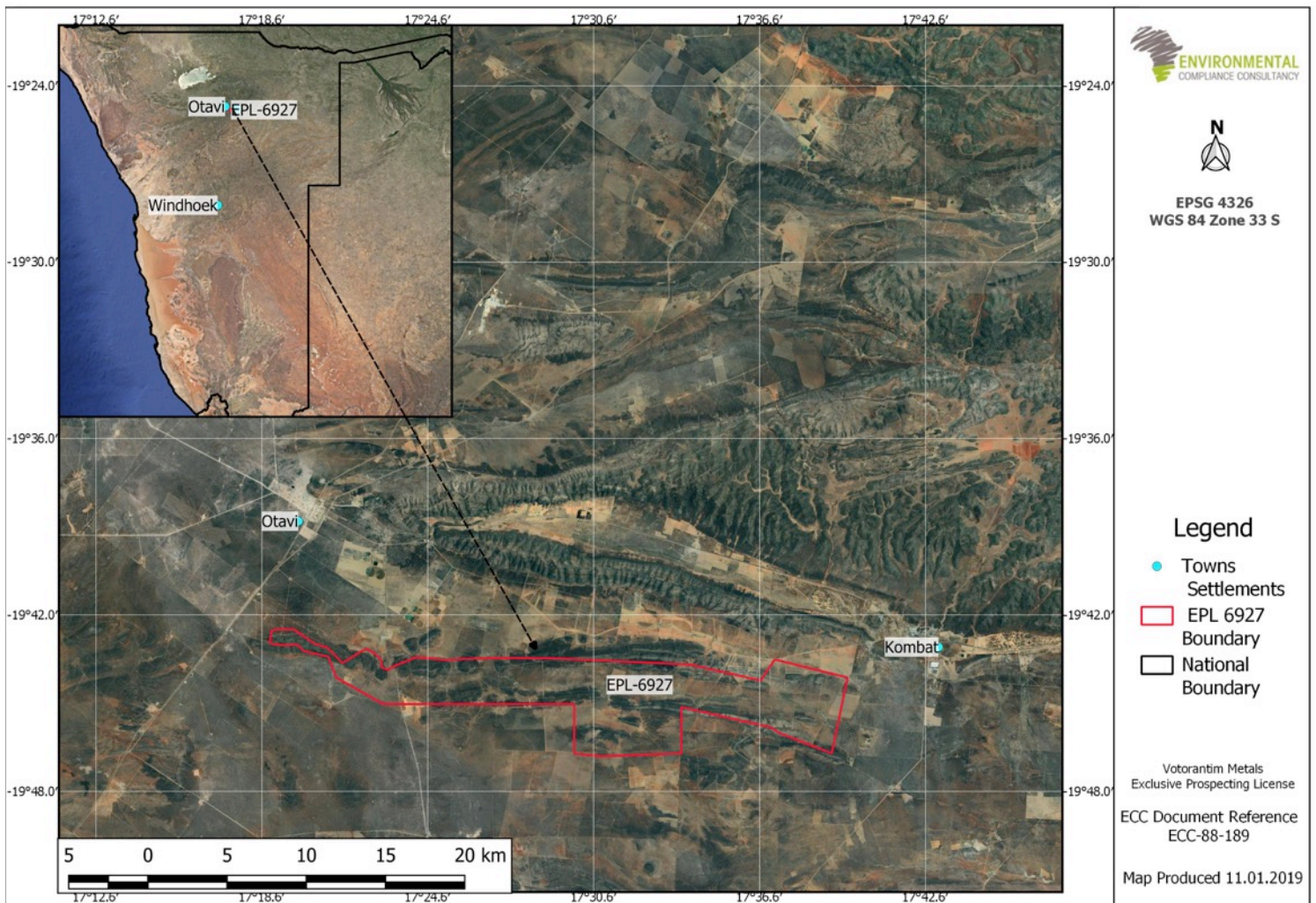


FIGURE 1 - LOCALITY MAP EPL 6927

## 1.2. ENVIRONMENTAL REQUIREMENTS

The Environmental Management Act, 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 in accordance with the Environmental Management Act, 2007 and supporting regulations are as follows.

### MINING AND QUARRYING ACTIVITIES

(3.1) The construction of facilities for any process or activities which requires a licence, right or other form of authorisation, and the renewal of a licence, right or other form of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992

- ✓ The proposed project requires a licence for extraction of metals and industrial minerals

(3.2) Other forms of mining or extraction of any natural resources whether regulated by law or not

- ✓ Minerals (soil and sand), metals will be sourced out within the projects footprint/ locally as far as possible

(3.3) Resource extraction, manipulation, conservation and related activities

- ✓ The proposed project will extract industrial minerals

### WATER RESOURCE DEVELOPMENT

(8.1) The abstraction of ground or surface water for industrial or commercial purposes

- ✓ Due to the drilling of exploration boreholes, ground and surface water will be abstracted

(8.5) Construction of dams, reservoirs, levees and weirs

- ✓ The proposed project is required to drill exploration boreholes within the project footprint

### INFRASTRUCTURE

10.1 The construction of (b) Public roads

- ✓ With this proposed project there is a potential creation of access tracks where existing tracks cannot be utilised

In accordance with the Environmental Management Act, 2007, an environmental impact assessment (EIA) of the proposed project is required, and subsequent report (this document) submitted as part of the application for Environmental Clearance Certificate.

## 1.3. PURPOSE OF THIS REPORT

The purpose of this report is to present the findings of the EIA for the proposed project. The EIA has been undertaken in accordance with the requirements of the Environmental Management Act, 2007 and the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011) gazetted under the Environmental Management Act, 2007 (referred to herein as the EIA Regulations). This scoping report and appendices will be submitted to the Ministry of Mines and Energy (MME) and the Directorate of Environmental Affairs (DEA) at the Ministry of Environment and Tourism (MET) for review as part of the application for an environmental clearance certificate.

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, explore alternatives for technical recommendations and identify appropriate mitigation measures.

This report provides information to authorities, the public and stakeholders to aid in the decision-making process for the proposed project. The objectives 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
- Describe the need and desirability of the activity
- Provide a high-level environmental and social impact assessment on feasible alternatives that were considered, and
- Report the assessment findings, identifying the significance of effects, including cumulative effects.

In addition to the environmental assessment, an environmental management plan (EMP) (Appendix E) is also required. An EMP has been developed to provide a management framework for the planning and implementation of exploration activities. The EMP provides exploration standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented and minimised as far as reasonably practicable and that statutory requirements and other legal obligations are fulfilled.

#### 1.4. THE PROPONENT OF THE PROPOSED PROJECT

The proponent of the proposed project is Votorantim Metals Namibia (Pty) Ltd

**TABLE 1 - PROPONENT DETAILS**

VOTORANTIM METALS NAMIBIA (PTY) LTD
P O Box 97957 – Maerua Park, Windhoek Namibia Manager: Ms Yvonne Natalie Hass

#### 1.5. ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy, a Namibian consultancy registration number 2013/11401, has prepared this document on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. The CVs of the authors of this report is contained in Appendix A. ECC is independent of the proponent and has no vested or financial interested in the proposed project expect for fair remuneration of professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or post to the following address:

**Environmental Compliance Consultancy**

PO BOX 91193  
Klein Windhoek, Namibia  
Tel: +264 81 669 7608  
Email: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)



## 1.6. REPORT STRUCTURE

**TABLE 2 – ENVIRONMENTAL SCOPING REPORT SECTIONS**

SECTION	TITLE	CONTENT
-	Executive Summary	Executive summary of the EIA
-	Acronyms	A list of acronyms used during the report
<b>1</b>	Introduction	This section introduces the EIA and provides background information on the proposed project, proponent and purpose of the report
<b>2</b>	Regulatory Framework	This chapter describes the Namibian environmental regulatory framework applicable to the project and how it has been considered in the assessment and the scoping report and EMP.
<b>3</b>	Project Description	Presents a description of the proposed project and how the proposed project will be operated.
<b>4</b>	Impact Assessment and Mitigation	This chapter presents the predicted potential environmental and social effects arising from the proposed project, and the mitigation and management strategies to be applied to avoid or reduce the effects.
<b>5</b>	Conclusions	Conclude the findings of the EIA
<b>6</b>	References	A list of reference used for this report
<b>Appendix</b>	Appendices A-F	<ul style="list-style-type: none"> <li>- Appendix A: Site Visit Notes of Farm Neuwerk No 507 – Deblin Mine</li> <li>- Appendix B: ECC CV's</li> <li>- Appendix C: Project Registered Post</li> <li>- Appendix D: Evidence of Public Consultation – Background Information Document, site notice, Newspaper adverts</li> <li>- Appendix E: Assessment Methodology</li> <li>- Appendix F: Environmental Management Plan</li> </ul>

## 2 REGULATORY FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed project. Table 2 provides a list of applicable legislation and the relevance to the project.

TABLE 3 – LEGAL COMPLIANCE

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
<p><b>Minerals (Prospecting and Mining) Act No 33 of 1992</b></p>	<p>Provides for the reconnaissance, prospecting and mining for, and disposal of, and the exercise of control, minerals in Namibia.</p> <p>Section 50 (i) requires <i>“an environmental impact assessment indicating the extent of any pollution of the environment before any prospecting operations or mining operations are being carried out and an estimate of any pollution, if any, likely to be caused by such prospecting operations or mining operations”</i></p> <p>Section 50 sets out that in addition to any term and condition contained in a mineral agreement and any term and condition contained in any mineral licence, it shall be a term and condition of any mineral licence that the holder of such mineral licence shall:</p> <p>Exercise any right granted to him or her in terms of the provisions of this Act reasonably and in such manner that the rights and interests of the owner of any land to which such licence relates are not adversely affected, except to the extent to which such owner is compensated.</p> <p>Section 52 sets out that the holder of a mineral licence shall not exercise any rights conferred upon such holder by this Act or under any terms and conditions of such mineral licence</p> <p>(a) In, on or under any private land until such time as such holder-</p> <p>(i) Has entered into an agreement in writing with the owner of such land containing terms and conditions relating to the payment of compensation, or the owner of such land has in writing waked any right to such compensation and has submitted a copy of such agreement or waiver to the Commissioner.</p>	<p>The proposed activity is prospecting for minerals; hence it requires an EIA to be carried out as it triggers listed activities in terms of the Environmental Management Act and its regulations. This report presents the findings of the EIA.</p> <p>Works shall not commence until all conditions in the Act are met, which includes an agreement with the landowners and conditions of compensation have been agreed.</p> <p>The project shall be compliant with section 76 of the Minerals Act. With regards to records, maps, plans and financial statements, information, reports, and returns submitted.</p> <p>As the proponent will need to access privately owned land the proponent will ensure sections 50 and 52 are complied with.</p>

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
<p><b>Environmental Management Act, 2007 (Act No. 7 of 2007) and associated regulations, including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011)</b></p>	<p>The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment.</p> <p>It sets the principles of environmental management as well as the functions and powers of the Minister. The Act requires certain activities to obtain an environmental clearance certificate prior to project development. The Act states an EIA may be undertaken and submitted as part of the environmental clearance certificate application.</p> <p>The MET is responsible for the protection and management of Namibia's natural environment. The Department of Environmental Affairs under MET is responsible for the administration of the environmental clearance certificate process.</p>	<p>This Environmental Scoping Report and assessment plus the EMP documents the findings of the environmental assessment undertaken for the proposed project, which will form part of the environmental clearance application. The assessment and report have been undertaken in line with the requirements in terms of the Act and its regulations.</p>
<p><b>Water Act, 1956</b></p>	<p>This Act provides for "the control, conservation and use of water for domestic, agricultural, urban and industrial purposes; to make provision for the control, in certain respects... and for the control of certain activities on or in water in certain areas".</p> <p>The Ministry of Agriculture Water and Forestry Department of Water Affairs is responsible for the administration of the Water Act.</p> <p>The Minister may issue a Permit in terms of the regulations 5 and 9 of the government notice R1278 of 23 July 1971 as promulgated under section 30 (2) of the Water Act no. 54 of 1956, as amended. To abstract water from a controlled water source, a WA 002 should be filled and submitted to the MAWF</p>	<p>The Act stipulates obligations to prevent pollution of water. The EMP sets out measures to avoid polluting the water environment.</p> <p>Regulation 5: "Upon receipt of an application in terms of regulation 4(1) the Minister may issue a permit authorising the applicant to sink, enlarge, deepen, alter, open up or clean any borehole, well or spring mentioned in the application or to abstract therefrom and use a specific quantity of water for the purposes and subject to the conditions specified in the permit: Provided that, if the Director is of opinion that artesian water is or will be found in a borehole or well, the Minister shall not consider an application unless it is recommended by the Board. "</p> <p>Regulation 9: The Minister may, when issuing a permit under regulation 5, impose such conditions, whether generally or in respect of different periods in any year, as he may deem necessary for an equitable distribution of water in the public interest or for the conservation of water supplies or</p>

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
		for the protection of water sources, including conditions in respect of - Measures to minimise potential groundwater and surface water pollution are contained in the EMP.
<b>Soil Conservation Act No.76 of 1969</b>	Makes provision for the prevention and control of soil erosion and the protection, improvement and the conservation, improvement and manner of use of the soil and vegetation.	Taken into consideration during the design of the works to be undertaken on the EPL sites. Measures in the EMP set out methods to avoid soil erosion.
<b>National Heritage Act, No. 27 of 2004.</b>	The Act provides provision of the protection and conservation of places and objects with heritage significance. Section 55 compels exploration companies to report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued	There is potential for heritage objects to be found on the sites, therefore the stipulations in the Act have been taken into consideration and are incorporated into the EMP. Section 55 compels exploration companies to report any archaeological findings to the National Heritage Council after which a permit needs to be issued before the find can be disturbed.

## 2.1 POLICY

### 2.1.1 MINERALS POLICY

The Minerals Policy was adopted in 2002 and sets guiding principles and direction for the development of the Namibian mining sector while communicating the values of the Namibian people. It sets out to achieve several objectives in line with the sustainable development of Namibia's natural resources. The policy strives to create an enabling environment for local and foreign investments in the mining sector and seeks to maximise the benefits for the Namibian people from the mining sector while encouraging local participation, amongst others.

The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan (NDP5) that include reduction of poverty, employment creation, and economic empowerment in Namibia. The proposed project conforms with the policy, which has been considered through the EIA process and the production of this report.

## 2.2 LICENCES

### 2.2.1 EXCLUSIVE PROSPECTING LICENCE

EPL 6927 was granted on the 26<sup>th</sup> of November 2018 and expires on the 25<sup>th</sup> of November 2021. In terms of the Minerals (Prospecting and Mining) Act, 1992, an EPL may be renewed, however, may only be extended twice for two-year periods if demonstrable progress is shown. Renewals beyond seven years requires special approvals from the Minister (Ministry of Mines and Energy, 2018). Such renewals are subject to a reduction in size of the EPL. When a company applies for renewal of an EPL, the application must be lodged 90 days prior to the expiry date of the EPL or, with good reason, no later than the expiry date (Ministry of Environment and Tourism, Ministry of Mines and Energy, 2018).

The proposed project is expected to be scheduled over a seven-year period, therefore two renewal applications are likely to be applied for. MET must review the renewal application and make any comments and/or recommendations for consideration by the Minerals (Prospecting and Mining Rights) Committee (MPMRC). Amendments and revisions may be required for the EIA and EMP. Due consideration must be given when renewing the licence to ascertain whether there is justification to renew the licence. Once an EPL expires and a new EPL is issued, even if it is to the previous holder, the full screening process must be followed with a full EIA process before operations may commence (Ministry of Environment and Tourism, Ministry of Mines and Energy, 2018).

### 3 PROJECT DESCRIPTION

#### 3.1 NEED FOR THE PROPOSED PROJECT

The mining sector in Namibia significantly contributes to the country's Gross Domestic Product (GDP), government tax receipts and export revenues. For this reason, exploration activities are encouraged in Namibia and the vision of the Minerals Policy being to *"further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing"* supports the development.

The proposed project is in line with this vision and has the potential to create employment in the local community of the Otjozondjupa Region. In the event that exploration activities are fruitful, and a resource can be defined in commercially viable concentrations, exploration operations can potentially transcend into mining operations which can result in significant socio-economic development in the area.

#### 3.2 ALTERNATIVES CONSIDERED

##### 3.2.1 NO-GO ALTERNATIVE

Should exploration activities on EPL 6927 not proceed, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with project would also not realise.

There would not be an opportunity to refine Namibian resources in the project area, a missed opportunity for geological mapping and data collection that benefits the Namibian economy.

#### 3.3 PROJECT SITE AND LOCATION

EPL 6927 is situated in the Otjozondjupa Region, Namibia. The region is serviced with roads, high voltage power, water, and is close to major towns and mining processing facilities; including the non-active Kombat copper mine and the Tsumeb Smelter. The EPL covers an area of approximately 12 000 Ha and is situated approximately 25 to 30km from Otavi and approximately 14 km from the Kombat settlement along the B8 and D2820 roads. District road (D2820) passes through the northern central and eastern portion of the licence area site and the site can be accessed using existing farm tracks.

##### 3.3.1 PROPOSED EXPLORATION ACTIVITIES

Exploration activities on EPL 6927 will include soil and rock sampling, geological mapping, electromagnetic and geophysical surveys, drilling and core sampling. Some vegetation may be cleared to allow access tracks and working areas to be created and for the installation and development of exploration drill holes. The duration of exploration activities is anticipated to be conducted over the course of a 3 year period (or for the duration of the mineral licence) and the periods of each exploration programme will vary and will be refined as geological information becomes available.

Existing tracks will be used as far as reasonably practical; in the event that new tracks are required they will be developed by hand or using a bulldozer if the area is heavily bush encroached or hilly. Vegetation clearance shall be required for drill access tracks, drill pads and for a drillers' camp if required. This will also be carried out by hand or bulldozer depending on the bush thickness and the required clearance distances.

The exploration methods on EPL 6927 involves the following: soil and rock sampling, geological mapping, electromagnetic and geophysical ground surveys, drilling and core sampling. Further detail of these methods are set out below.

##### **Geochemical (soil and rock sampling) Surveys**

Soil and rock sampling are an inexpensive and non-invasive technique to determine the existence and extent of a potential resource. Soil sampling and rock chip sampling are undertaken to define the location and delineation of a

mineralised structure. Data obtained from the geochemical survey can save a large amount of money as the project advances, as the drill plan can be further refined and more accurate drill-hole targeting can be carried out. In essence, the data from geochemical surveys allows the company to drill less holes and increases the chances of intersecting mineralised zones during exploration thereby reducing the overall foot print of exploration in the area. Geochemical Surveys are therefore the first exploration method to be undertaken by Votorantim Metals Namibia (Pty) Ltd in the licence area.

### **Geological Mapping**

Geological mapping of outcrops is used to describe the primary lithology and morphology of rock bodies as well as age relationships between rock units (Brimhall, Dillies, & Proffett, 2005). Mapping is a crucial part of refining subsurface targets as it provides structural information and can be used to predict the subsurface geology. This will be conducted concurrently with the geochemical survey.

### **Geophysical Ground Surveys**

Geophysical ground surveys will be undertaken to collect data that give an indication of rock properties, particularly at depth. They are also used to map the geology and structures. Induced Polarization (IP) surveys will be undertaken involving electrical high voltage currents and measured via electrodes in the ground along linear cut lines up to 3km to provide access to electrical cables and staff. Small holes (0.2m x 0.2m x 0.3m) will be required for IP electrodes every 50m along a survey line. Copper sulphate solution will be used to improve the conduction of electrodes during the IP survey. During Audio - Magnetotelluric (AMT) surveys the same lines and small holes in the ground will be used, but without the application of high voltage electrical currents.

### **Drilling and Core Sampling**

Drilling is planned for subsurface sampling and will entail diamond drilling to be undertaken in order to obtain drill core samples. Bio-degradable drill additives will be used during diamond core drilling.

Soil, rock and drill core samples will be stored at the Otavi office. All exploration activities will be undertaken in programmed segments.

The area to be cleared shall not be more than 15ha, therefore would not trigger the Forest Act, 2001 (Section 23). In addition, any established or large trees shall not be removed, and effects are likely to be low (see Section 5.4 and the EMP).

## **3.3.2 EXPLORATION SCHEDULE**

Exploration techniques as discussed above are anticipated to be carried out over the licence validity period. Geochemical surveys will be undertaken concurrently with geological mapping for approximately 2 months. Geophysical surveys will then be carried out over a period of two months after which the project will advance to diamond core drilling; the duration of the drilling programme is yet to be refined as more geological information becomes available. The environmental clearance certificate along with all required permits will be renewed accordingly during this period.

## **3.3.3 EQUIPMENT AND MATERIAL**

During the exploration phase double and single cab vehicles will be used to transport workers to and from and around the site. A drilling truck will be brought to site for core drilling, along with a water truck and supporting trucks for use during drilling. The drilling equipment, diesel fuel and consumables shall be brought to the exploration site to support exploration activities.

## **3.3.4 WORKERS AND ACCOMMODATION**

Approximately 26 workers will be employed during the exploration phase, workers will mainly be from Otavi. During the soil sampling, six (6) people will be employed, two (2) during geological mapping, twelve (12) during the

geophysical surveys and six (6) during drilling operations. The workers will reside in Otavi and transport to and from the site (25km – 30km) will be provided by the company. Workers may however be required to stay at the exploration site in campsites or on existing properties during the exploration phase, the proponent shall have showers and portable toilets during this period. The camping equipment shall include tents and a portable kitchen.

### 3.3.5 RESOURCE USE AND WASTE MANAGEMENT

Water will be required for various uses including human consumption and exploration activities. It will most likely be sourced from an existing water source on site, after permission has been obtained from the farm owner. Alternatively, a borehole will be drilled, in this case the required water borehole permits and abstraction permit shall be obtained from the Ministry of Agriculture Water and Forestry.

Waste shall be produced on site, which shall include sewerage and solid waste such as packaging. All solid waste shall be collected, taken off site and disposed of at the nearest waste management facility. Mobile toilets will be used on site, sewerage generated shall be managed by the toilet contractor. The proponent will ensure waste transport certificates are provided by the toilet contractor for sewerage waste removed from site. No waste shall be discharged to the environment.

## 3.4 REHABILITATION

Once exploration activities are completed the areas shall be rehabilitated. Rehabilitation shall be determined during the exploration programme and shall be agreed with the landowner as discussed in Section 2.2 and the MET.

## 3.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

A number of limitations and uncertainties were acknowledged during the EIA process, which is summarised in Table 3 with the assumptions made to manage them. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed.

**TABLE 4 – LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS**

LIMITATION / UNCERTAINTY	ASSUMPTION
– Water source is unconfirmed	– Water shall be acquired from existing sources on site (this site is yet to be defined). If this is not available, a borehole shall be drilled, and the required permit shall be obtained from MAWF.



## 4 BASELINE ENVIRONMENT

### 4.1 SITE AND SURROUNDING ENVIRONMENT

EPL 6927 straddles the boundary between the Northern Platform and the Northern Zone of the Damara Orogen. It is underlain by formations of the Nosib Group, Askevold Formation volcanics and the Otavi Group sedimentary rocks. The surrounding area is known to host mineral resources such as gold, copper, lead, silver, vanadium and zinc (Mendelsohn et al., 2003). Fourteen (14) farms as shown in Figure 2 are covered or partially covered by the EPL, on which 'land use' predominantly comprises agricultural activities, including dry-land and irrigated cultivation, large and small livestock farming as well as coal-making.

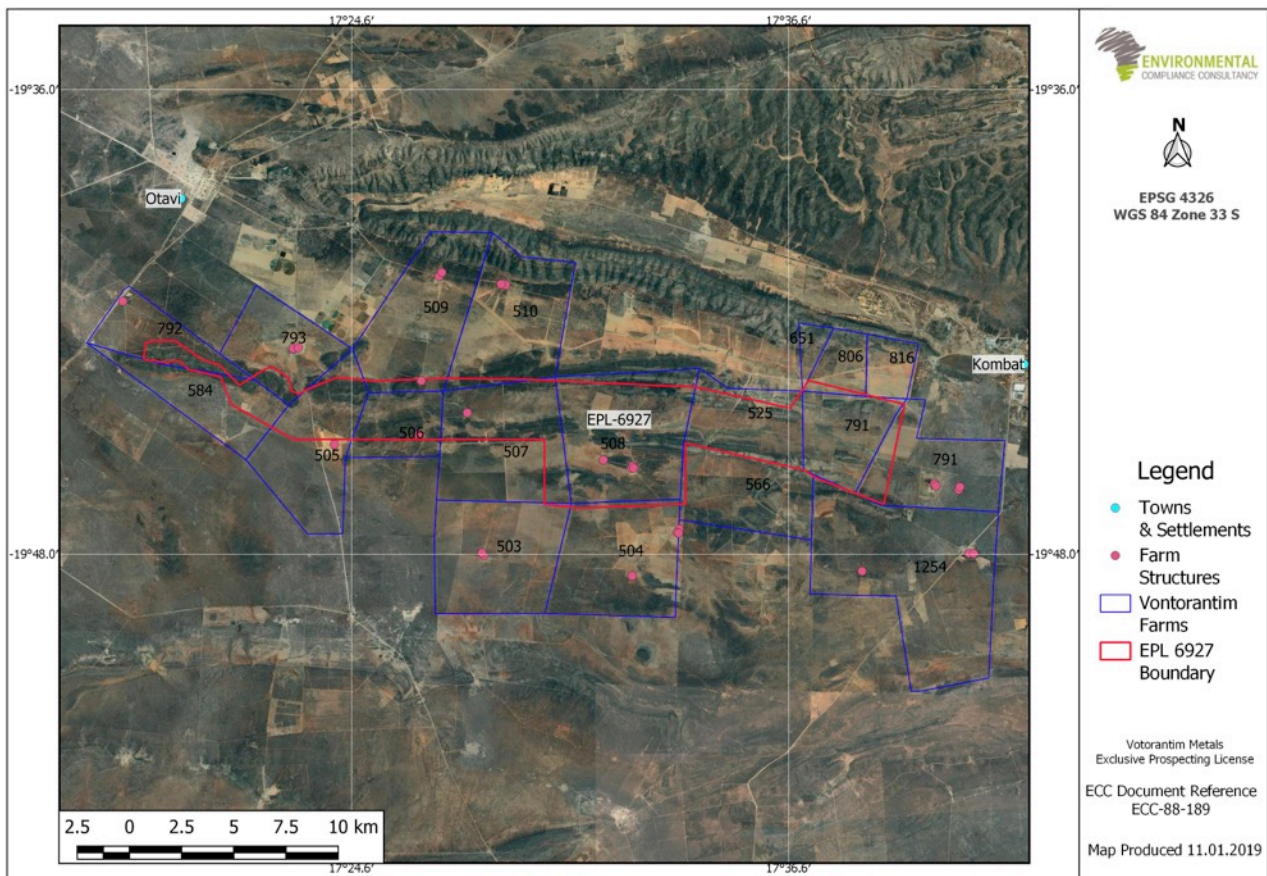


FIGURE 2 - FARM BOUNDARIES WITHIN EPL 6927

#### Landscape and geological rock types

EPL 6927 is situated in the Karstveld landscape, dominated by calcrete surface cover and underlying carbonates with little or no surface run-off, development of sinkholes and caves. The major sedimentary rock types in the area are dolostone, limestone, diamictite, shale, sandstone and volcano-metamorphic rocks such as amphibolite.

#### Soil type

A variety of soil types can be found within EPL 6927. These are: eutric regosols, which are medium or fine textured soils with high base saturation and which are relatively fertile, chromic luvisols which have a well-drained porous and aerated structure and typically have bright colours and the area is also covered in rock outcrops.

### **Surface and Ground water**

EPL 6927 is situated on a moderately productive aquifer and is situated in the Okavango Omatako Basin and the Ugab-Huab Basin. The predominant uses of ground water in the area are for domestic purposes, subsistence and small-scale farming and large-scale commercial farming.

### **Temperature and Rainfall**

The average annual temperatures in the EPL area are 20°C - 22°C. Temperatures in the area reach a maximum of 30°C -36°C. The average minimum temperature in the area is between 4°C and 6°C. The average rainfall in the area ranges from 450mm to 500mm per annum.

### **Flora and Fauna**

EPL 6927 lies in the Acacia Tree-and-Shrub Savanna biome and has Karstveld and Thornbush Shrubland vegetation types (Mendelsohn et al., 2003). Acacia shrubland is the dominant vegetation in the low-lying areas, while the hills are covered by deciduous trees and shrubs. The valleys are generally bush-encroached and densely covered, while the occasional, open expanses of grasslands dotted with acacia trees are rare (mostly areas in which bush has been eradicated).

The area supports a 'medium-high' terrestrial diversity of animal and plant life compared to the rest of Namibia. The plant diversity in the area has approximately 400 – 500 species. There are approximately 201 – 230 species of birds in the area.

## 5 ENVIRONMENTAL IMPACT ASSESSMENT

### 5.1. PURPOSE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

The EIA process in Namibia is governed and controlled by the Environmental Management Act, 2007 and the EIA Regulations No. 30 of 2012, which is administered by the Office of the Environmental Commissioner through the DEA of MET.

An EIA is a process of identifying, predicting, evaluating and mitigating the potential effects of a proposed project on the natural and human environment. The aim of the EIA process and subsequent report are to apply the principles of environmental management to proposed activities; reduce the negative and increase the positive effects arising from a proposed project; provide an opportunity for the public to consider the environmental impacts of a proposed project through meaningful consultation; and to provide a vehicle to present the findings of the assessment process to competent authorities for decision making.

### 5.2. THE ASSESSMENT PROCESS

The EIA methodology applied to this EIA has been developed using the IFC standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012); Namibian draft procedures and guidance for EIA and EMP (Republic of Namibia, 2008); international and national best practice; and over 25 years of combined EIA experience. The process followed through the basic assessment is illustrated in Figure 3 and detailed further in the following sections.

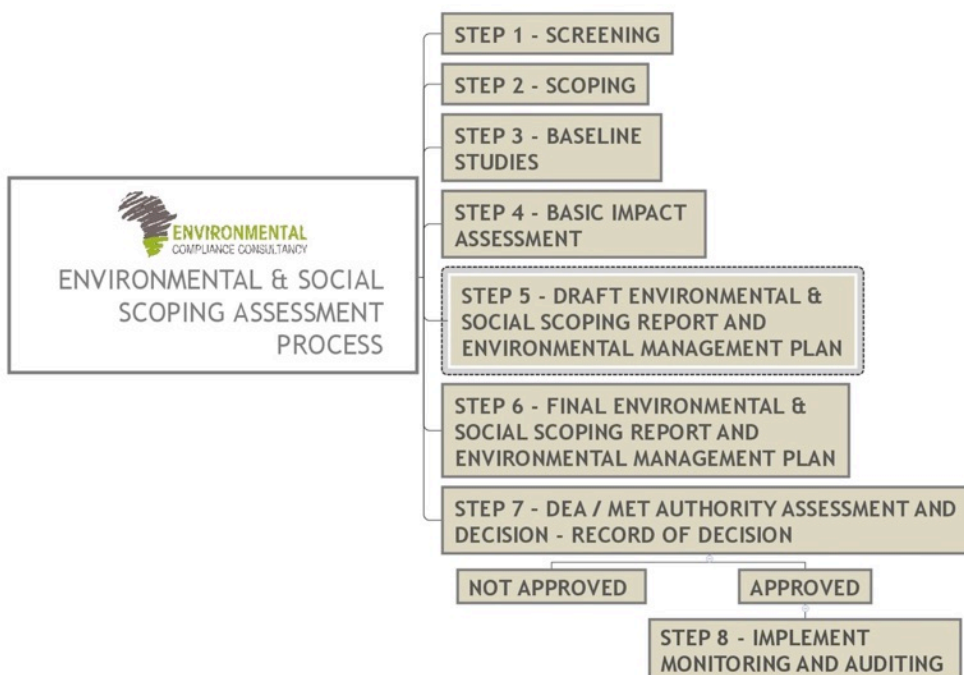


FIGURE 3 – EIA SCOPING PROCESS

### 5.2.1. SCREENING OF THE PROPOSED PROJECT

The first stages of the EIA process are to register the project with the Competent Authority and undertake a screening exercise. The screening exercise determines whether the proposed project is considered as a Listed Activity in terms of the Environmental Management Act, 2007 and associated Regulations and if significant impacts may arise. During this process, the location, scale and duration of project activities are considered against the potentially impacted environment to determine the approach of the EIA.

Through screening, the proposed project was identified as a listed activity; however, significant effects will unlikely arise as a result of project activities. Therefore, it was concluded that an EIA scoping report was required and deemed sufficient, and no further work (detailed assessment) would be required, however this would be confirmed during the scoping assessment stage.

### 5.2.2. SCOPING OF THE ENVIRONMENTAL ASSESSMENT

The purpose of the scoping stage in the EIA process is to identify the scope of assessment; undertake a high-level assessment to identify potential impacts; and confirm if further investigation is required to assign the severity of potential significant effects and appropriate mitigation.

This report presents the findings of the scoping phase and high-level assessment and confirms that no further investigation is required. This conclusion is presented in section 5.

#### 5.2.2.1. BASELINE STUDIES

Baseline studies are undertaken as part of the scoping stage which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured.

For the proposed project, baseline information was obtained through a desk-based study, focussing on environmental receptors that could be affected by the proposed project. The baseline is presented in Section 4.

#### 5.2.2.2. IMPACT PREDICTION AND EVALUATION

Impact prediction and evaluation involves predicting the possible changes to the environment as a result of the development/project. The methodology presented in Appendix D was applied to determine the magnitude of impact and whether or not the impact was considered significant or if further investigation was required. The findings of the high-level assessment are presented in section 5.

## 5.3. CONSULTATION

Public participation and consultation are a requirement stipulated in Section 21 of the Environmental Management Act, 2007 and associated 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.

A key aim of the consultation process is to inform stakeholders and interested and affected parties (I&APs) 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.

### 5.3.1. NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in two newspapers namely the 'Namibian' and the 'Informante' on the 14<sup>th</sup> and 21<sup>st</sup> of February 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.

### 5.3.2. 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 enquiries to all registered I&APs. The NTS can be found in Appendix C.

### 5.3.3. SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of the proposed project. The notice was set up at the boundary of the EPL as illustrated in Appendix C.

### 5.3.4. CONSULTATION FEEDBACK

No issues or concerns were raised by the I&APs during the consultation period. In addition, ECC sent registered post to all farm owners covered by the EPL as set out in Appendix B.

## 5.4. ENVIRONMENTAL ASSESSMENT FINDINGS

### 5.4.1. SCOPING ASSESSMENT FINDINGS

When undertaking the scoping exercise, the design of the proposed project and best practice measures were considered to ensure the likely significant effects and any required additional mitigation measures were identified. The following topics were considered during the scoping phase:

- Surface water and groundwater (including geomorphology)
- Soils and geology
- Landscape (visual impacts, change in landscape, sense of place)
- Socio-economics (employment, local businesses, community, demographics & tourism, land use)
- Noise
- Ecology (fauna & flora)
- Human environment (infrastructural services, traffic and transport)
- Air quality (including dust), and
- Cultural heritage and palaeontology resources.

The source-pathway-receptor model was used to evaluate the potential impacts of the proposed project and determine if further assessment is required.

- Source of potential impact - where does the impact come from, e.g. the activity, ground excavation, which emits dust
- The potential pathway – how can the pollution / impact travel through the environment e.g. wind direction and speed, and
- The receptor and effect – what can be affected and how e.g. water body, sedimentation, water quality affected.

TABLE 5 sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and/or receptor has not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

**TABLE 5 – SCOPING ASSESSMENT FINDINGS**

TOPICS	ACTIVITY	RECEPTOR	PATHWAY	EFFECT	FURTHER ASSESSMENT JUSTIFICATION
<b>Surface &amp; groundwater</b>	<ul style="list-style-type: none"> <li>– Exploration drilling</li> </ul>	<ul style="list-style-type: none"> <li>– Groundwater</li> </ul>	<ul style="list-style-type: none"> <li>– Drilling at depth and or near the water table</li> <li>– Potential ground water extraction, and</li> <li>– Drill fluid interaction</li> </ul>	<ul style="list-style-type: none"> <li>– Drilling could penetrate the groundwater table and the drill fluid could enter the groundwater causing pollution</li> <li>– Pollution from loss of hydrocarbons, oil spills and drill fluids into the groundwater, and</li> <li>– A decrease in groundwater /changes to groundwater table due to ground water extraction.</li> </ul>	<ul style="list-style-type: none"> <li>– Extraction volumes of water shall be minimal during the program and where possible, water shall be used from existing sources.</li> <li>– No effects on the recharge or flow of groundwater, and</li> <li>– With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated.</li> </ul> <p><b>No further assessment required as there is a low probability of significant impacts to the surface and groundwater.</b></p>
<b>Soils and geology</b>	<ul style="list-style-type: none"> <li>– Vegetation clearance</li> <li>– Minor earthworks</li> <li>– Creation of access tracks</li> <li>– Drilling and creation of drill pads, and</li> <li>– Use of equipment (vehicles)</li> </ul>	<ul style="list-style-type: none"> <li>– Soil (e.g. quality)</li> </ul>	<ul style="list-style-type: none"> <li>– Loss of vegetation from clearing land for drill access and track creation</li> <li>– Loss of vegetation due to vehicles use leading to soil erosion, and</li> <li>– Drill fluids entering the environment and spilling on to the ground.</li> </ul>	<ul style="list-style-type: none"> <li>– Reduction in soil quality</li> </ul>	<ul style="list-style-type: none"> <li>– Soil quality is relatively good in the area</li> <li>– With the mitigation and management measures listed in the EMP, these effects on soil quality would be minimised and no likely significant affect anticipated.</li> </ul> <p><b>No further investigation required.</b></p>
<b>Landscape</b>	<ul style="list-style-type: none"> <li>– Presence of equipment and possibly campsites</li> </ul>	<ul style="list-style-type: none"> <li>– Farm owners (residential properties)</li> <li>– Views from the road (tourists and local community)</li> </ul>	<ul style="list-style-type: none"> <li>– Views</li> </ul>	<ul style="list-style-type: none"> <li>– Changes to views (people’s perception), and</li> <li>– Changes to the local landscape</li> </ul>	<ul style="list-style-type: none"> <li>– Short-term duration for the presence of equipment, which shall move frequently and shall not result in long-term effects, and</li> <li>– With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated.</li> </ul>

TOPICS	ACTIVITY	RECEPTOR	PATHWAY	EFFECT	FURTHER ASSESSMENT JUSTIFICATION
					<b>No further investigation required.</b>
<b>Land use</b>	– Exploration activities	– Farmers and cattle	– Change or disturbance of land use	– Cattle restricted from areas where activities occur, affecting daily operations of the farm and potential cost implications.	– Short term temporary changes are unlikely to result in a significant effect, and – With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated. <b>No further investigation required.</b>
<b>Socio-economics</b>	– Exploration activities	– People (residents of farms and Otavi) – The local economy, and – Farm access	– Increased socio-economic development associated with exploration activities – Direct change to access	– Creation of local jobs – Direct impacts to the local community through increased income generation – Knowledge and technology transfer, – Loss of access or access affected to the farm and farm areas.	– Beneficial effects to the local community and economy, however not considered significant for exploration works, and – With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated. <b>No further investigation required.</b>
<b>Noise</b>	– Drilling operations, and – Vehicle movements	– People (farmhouses) – Cattle, and – Ecological receptors.	– Noise carrying to receptors within 200m	– Short-term increase in noise levels heard by farmers (disruption)	– Sensitive animals, birds, and insects etc. can move away from the area. – Short duration, isolated changes to the baseline, possible effect on receptors in particular residents in farmhouses, and – With the mitigation and management measures (including robust stakeholder engagement throughout the exploration program) listed in the EMP, these effects would be minimised and no likely significant affect anticipated. <b>A detailed assessment is not required, however, due to the uncertainty surrounding the risk of affecting sensitive receptors due to the increase in noise levels, further investigation was deemed necessary.</b>

TOPICS	ACTIVITY	RECEPTOR	PATHWAY	EFFECT	FURTHER ASSESSMENT JUSTIFICATION
<b>Ecology</b>	<ul style="list-style-type: none"> <li>- Drilling operations</li> <li>- Vegetation clearing</li> <li>- Hauling equipment, and</li> <li>- Vehicle movements.</li> </ul>	<ul style="list-style-type: none"> <li>- Flora and fauna</li> </ul>	<ul style="list-style-type: none"> <li>- Direct and indirect disturbance</li> </ul>	<ul style="list-style-type: none"> <li>- Loss of vegetation</li> <li>- Injury or mortality of individual species</li> </ul>	<ul style="list-style-type: none"> <li>- No known protected species of flora and fauna</li> <li>- Sensitive animals, birds, and insects etc. can move away from the area.</li> <li>- Localised vegetation removal, no loss of habitat connectivity, and</li> <li>- With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated.</li> </ul> <p><b>No further investigation required</b></p>
<b>Air Quality – Dust</b>	<ul style="list-style-type: none"> <li>- Drilling</li> <li>- Vehicles and machinery activity</li> </ul>	<ul style="list-style-type: none"> <li>- People (farmhouses)</li> <li>- Ecological receptors, and</li> <li>- Cattle.</li> </ul>	<ul style="list-style-type: none"> <li>- Dust limit to travel &lt;100m</li> </ul>	<ul style="list-style-type: none"> <li>- Limited increase in dust deposition at farmhouses</li> </ul>	<ul style="list-style-type: none"> <li>- Short-term localised effects that are unlikely to be significant.</li> <li>- With the mitigation and management measures listed in the EMP, these effects would be minimised and no likely significant affect anticipated.</li> </ul> <p><b>No further investigation required</b></p>
<b>Cultural Heritage and Palaeontology resources</b>	<ul style="list-style-type: none"> <li>- Drilling</li> </ul>	<ul style="list-style-type: none"> <li>- No known artifacts or heritage remains.</li> </ul>	<ul style="list-style-type: none"> <li>- NA</li> </ul>	<ul style="list-style-type: none"> <li>- NA</li> </ul>	<ul style="list-style-type: none"> <li>- With the mitigation and management measures listed in the EMP, in particular, the Chance Finds Procedure, potential effects would be avoided and minimised and no likely significant affect anticipated.</li> </ul> <p><b>No further investigation required</b></p>
<b>Cumulative Effects</b>	<p>The combined environmental effects as a result of the activities of the proposed project are considered low and would not result in a significant adverse effect on any receptor identified above.</p> <p>The effects of the proposed project in combination with other projects on the EPL site or projects outside of the EPL boundary are considered to be low. This is due to the limited number of other projects in the area and likely effects on the same sensitive receptors.</p>				



Due to the nature and localised scale of the exploration activities, and the environmental context of the site, the potential environmental and social effects are limited and unlikely to be significant. The only area where uncertainty remained during the scoping phase was the potential effects on human receptors from the increase in noise levels, namely residents in farm houses. Further consideration of the potential effects on humans was therefore undertaken and are presented in the next section.

#### 5.4.2. FURTHER CONSIDERATION: NOISE LEVELS

Due to the rural nature of the EPL site and the lack of noisy activities in the area, the average noise levels across the EPL is most likely below the South African National Standards (SANS) 10103 for rural districts (45 dBA).

Drilling operations have the potential to increase the noise levels which could affect sensitive receptors. This nuisance noise could affect the lifestyle and daily tasks of residents and livestock and could also cause health issues, such as sleeping problems.

Due to the rural lifestyle of the residents in the project area and given that the receptors are used to a quiet environment, the potential impact is therefore considered as medium sensitivity due to a potential increase in noise levels from drilling operations. Drilling operations have the potential to increase the baseline, however this change would be for temporary and short-term. Through the application of the EIA methodology presented in Appendix D, the conclusion of the assessment is that without additional mitigation, the significance of effect is expected to be minor. With additional mitigation as listed below, the effects on human receptors from noise impacts would be reduced to low significance. No additional studies are considered necessary to further assess this risk of impact.

**TABLE 6 – SUMMARY OF EFFECTS**

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Drilling	- Humans	Nuisance Health Impact	Short term Temporary Local / on-site Direct Adverse Likely	Medium	Minor	Minor Adverse

The following additional mitigation measures have been identified in addition to those presented in the EMP and shall be communicated to the proponent to ensure environmental effects are minimised as reasonably practicable.

- No hammering of drill rods with steel hammers
- Drill equipment shall be suitably positioned to ensure that noisy equipment is away from human receptors
- Noise suppression measures shall be applied if drilling occurs in locations that may affect residents
- Residents shall be provided at least two weeks' notice of drilling operations within 1km of their property, and
- Continual engagement with residents shall be undertaken with the proponent.

The potential impact therefore is not considered significant as it does not widely exceed recognised levels of acceptable change; does not threaten the integrity of the receptors, nor it is material to the decision making.

## 5.5. ENVIRONMENTAL MANAGEMENT PLAN

The EMP for the proposed project is presented in Appendix F. It provides management options to ensure the impacts of the proposed project are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

The management measures should be adhered to during all stages of the exploration activities. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally sound manner.

The objectives of the EMP are:

- To include all components of the development and operations of the project
- To prescribe the best practicable control methods to lessen the environmental impacts associated with the project
- To monitor and audit the performance of operational personnel in applying such controls, and
- To ensure that appropriate environmental training is provided to responsible operational personnel.

## 6 CONCLUSIONS

ECC's EIA methodology was used to undertake the environmental assessment for the proposed project to identify if there is potential for significant effects to occur as a result of the proposed project. Through the scoping process, the only risk to the environment was the potential for noise levels to increase thereby impacting human receptors in the area. All other social and environmental receptors were scoped out as significant effects was unlikely and therefore no further assessment was deemed necessary. Through further analysis and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on humans from noise impacts is expected to be minor. Various best practice and mitigation measures have been identified to avoid and reduce effects as far as reasonably practical, as well as ensure the environment is protected and unforeseen effects are avoided.

**On this basis, it is the opinion of ECC that an environmental clearance certificate could be issued, on conditions that the management and mitigation measures specified in the EMP are implemented and adhered to.**

## 7 REFERENCES

- Brimhall, G., Dillies, J., & Proffett, J. (2005). *The Role of Geologic Mapping in Mineral Exploration*. GeoScience World.
- International Finance Corporation. (2012). *IFC Performance Standards on Environmental and Social Sustainability*. The World Bank.
- International Finance Corporation. (2017). *A Guide to Biodiversity for the Private Sector. The Social and Environmental Impact Assessment Process*.
- Mendelsohn et al., J. (2003). *Atlas of Namibia*. David Philip.
- Ministry of Environment and Tourism, Ministry of Mines and Energy. (2018). *National Policy on the Prospecting and Mining in Protected Areas*. Windhoek: Ministry of Environment and Tourism, Ministry of Mines and Ener.
- Ministry of Mines and Energy. (2018, August). *Mineral Rights and Resources Development*. Retrieved from Ministry of Mines and Energy: <http://www.mme.gov.na/mines/mrrd/>

## APPENDIX A: SITE VISIT NOTES OF FARM NEUWERK NO 507 – DEBLIN MINE





## FARM NEUWERK 507 / DEBLIN MINE - Environmental Report - March 2019

- This presentation covers some environmental impacts of current and past activities on the farm Neuwerk 507, Otjozondjupa Region.
- Impacts of historical exploration and mining activities at the Deblin Mine are specifically covered.
- The Neuwerk copper prospect was explored by different companies, dating back to the 1970's.
- Anglovaal (1970's), Mt Isa Mines (1990's) and Golden Deeps Limited (2011 - 2014) explored the prospect.
- Namib Lead Mine sunk the Deblin shaft in the 1970's and built ancillary mining structures, but mining activities did not last for long due to high water flow and probably poor grades (reports of only one truck-load of ore transported to Tsumeb).
- The images shown below focus on the environmental impacts of building the Deblin Mine, and what was left behind after most mine infrastructure was broken down and metal was salvaged.
- They also focus on the last environmental impacts caused by exploration drilling between 2011 and 2014.
- Regrowth of vegetation shows what natural rehabilitation is possible in 5 years, since the drilling of a couple of DD (diamond, core) and at least 19 RC (reverse circulation) holes by Golden Deeps.

## Landscapes on Farm Neuwerk



Deblin Mine Ridge - northern view



Deblin Mine Ridge - southern view

## Landscapes on Farm Neuwerk



View north from Deblin Prospect Ridge



View south from Deblin Prospect Ridge



## Landscapes and Vegetation on Farm Neuwerk



Bush-encroached valleys between mountain ridges  
(predominantly thorny, acacia & terminalia)



Tree-covered hillsides (predominantly deciduous,  
seringa, terminalia etc. )

## Access Tracks to Deblin Prospect



Grassland east of Deblin Mine Ridge, - cleared as landing-strip (?)



Access track south of Deblin Mine Ridge, showing ore silo and waste dump

## Access Tracks to Deblin Prospect



Access track from the north -  
calcrete-rich soil along mountain slopes, -  
Deblin Mine Ridge on the left horizon



Access track from the north - red-brown loamy soil  
in valleys between mountain ridges

## Farm Infrastructure and Activities



Access track from north through low-lying area or vley with dark-grey soil, red colour due to brick waste material



Access track from north - covered by red brick waste material, cattle-post in background

## Farm Infrastructure and Activities



Fence-lines cleared as fire-breaks, - ideal access for soil sampling and geophysical work



Coal-makers' access tracks - convenient access for soil sampling and geophysical work through bush-encroached valleys

## Farm Infrastructure and Activities



Coal-screening equipment and patches with coal dust



Temporary workers' village - wood-cutter shacks

## Farm Infrastructure and Activities



Wood-cutters' families live on site, in shacks made of sticks and plastic



Wood-cutters' church under a leadwood tree (combretum imberbe)

## Farm Infrastructure and Activities



Cattle ranching - calves on neighbouring farm Nordland



Agriculture - crop-field with irrigation point on neighbouring farm Nordland



## Historical and recent exploration activities



Old drill-site foundation, concrete drill-pad with anchors and uncapped standpipe (1970's)



Recent RC drill collar - covered with loose concrete plug bearing RC numbers & details

## Historical and recent exploration activities



Old drill-site - drill-hole collar and uncapped Standpipe (1970's)



Old drill-site - open, cement-lined drilling sump

## Historical and recent exploration activities



RC drill-site access track - opened by bulldozer



RC drill-site drill-pad - opened by excavator and levelled by bulldozer

## Deblin Mine (dormant)



Deblin Mine silo, waste-dump and remains of infrastructure



Deblin Mine shaft (approx. 2.5m in diameter and 50m deep) - concrete cover broken and unsafe

## Deblin Mine (dormant)



Deblin Mine -foundations of conveyor system pillars



Deblin Mine shaft (foreground) and ore silo (background), vehicle for scale

## Natural rehabilitation of drill access tracks



Natural regrowth on drill access tracks - mostly *dichrostachys cineria* (5 years since)



Grass-covered drill access track (5 years since last use)

## APPENDIX B: ECC CV'S



**ENVIRONMENTAL**  
COMPLIANCE CONSULTANCY



Hello! :)

**ABOUT ME**

**Name**  
Jessica Mooney

**Born**  
24 October 1984

**Phone**  
+264 81 653 1214

**Email**  
Jessica@enviroconsultants.co.za

**Website**  
www.enviroconsultants.co.za

Contact me!

**How to reach me!**

+264 81 653 1214 

Jessica.mooney7 

+264 81 653 1214 

Jessica Mooney 

# Jessica Mooney

## Environment & Safety Specialist



### Education & Qualifications

**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 >10m<sup>2</sup>  
Leading and Managing People –  
Brisbane North Institute of TAFE



### Experience & Work History

**Current**

**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)

**Nov 2013 - Feb 2016 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



**Jessica Mooney**  
Environment & Safety Specialist  
+264 81 653 1214

## 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'**



## Experience & Work History

### Feb 2013 - Feb 2014 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.

### Jan 2010 - Feb 2013 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

### Jan 2007 - Jan 2010 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





# Stephan Bezuidenhout

## Managing Director



Hello! :)

### ABOUT ME

**Name**  
Jacobus Stephan Bezuidenhout  
- But you can call me Stephan -

**Born**  
11 April 1989

**Phone**  
+27 74 181 8891 or  
+264 81 262 7872

**Email**  
stephan@enviroconsultants.co.za

**Website**  
www.enviroconsultants.co.za

Contact me!

### How to reach me!

+264 81 262 7872 

Stephan.bezuidenhout 

+27741818891 

Stephan Bezuidenhout 



### Education & Qualifications

University of Pretoria  
South Africa  
2012

Bachelor of Applied Science Hons -  
Environmental Management

University of Stellenbosch  
South Africa  
2008

Bachelors in Geography and Environment

#### Additional Qualifications:

- EcoNomics Sustainable Design Training Programme – Worley Parsons Int.
- Snake Bite and Snake Handling
- Level 1 & 2 First Aid
- Industrial Environmental Compliance

#### Publications:

*“Some ecological side-effects of chemical and physical bush clearing in a southern African rangeland ecosystem” in the South African Journal of Botany. Published on 14 Aug 2015.*



### Experience & Work History

#### Current

#### Managing Director

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)

#### Feb 2015 - Current

#### ENVIRONMENTAL CONSULTANT & PRACTITIONER

Clients in SA & Namibia

*In February 2015 an opportunity came about to launch my own business, Environmental Compliance Consultancy (ECC). During this time I have worked alongside Savannah Environmental (Pty) LTD and other consultancies to deliver several environmental projects including:*

- Abengoa Solar SA, Kaxu Solar One (100MW) Concentrating Solar Plants (CSP) Trough Environmental Control Officer during commissioning and rehabilitation phases Northern Cape Province, South Africa



**ENVIRONMENTAL**  
COMPLIANCE CONSULTANCY

## 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).

### Fun Facts:

- Keen fisherman (Big Game Fish)
- Passionate Hunter & Conservationist
- 21ft vessel certified skipper
- Summated Kilimanjaro
- Have survived scorpion stings and a snakebite!
- Did I mention I love camping?

### Words I live by:

**'Do what makes you happy  
the rest will follow'**



### Experience & Work History

#### Feb 2015 - Current Continued...

- **Konkoonsies II PV Solar Energy Facility, On-site substation and a 132kV power line** Environmental Assessment Practitioner during EIA process Northern Cape Province, South Africa
- **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.
- **Ebeneaser Empowerment Farm.** Annual External Water Use Licence Audit. Northern Cape, South Africa

#### Jan 2013 - Feb 2015 Environmental Coordinator

ROMPCO PIPELINE – Worley Parsons  
Mozambique and South Africa

- Experience was gained in the oil & gas and construction industries. The pipeline length was 127km. Application and obtaining of environmental permits encompassed a large section of the role. The position also required the management of an on-site environmental team. It was required to meet with different governmental departments and build relationships with key individuals to allow swift communication and permit a platform for transparency. Ensured compliance with National, best neighbouring as well as IFC legislation and standards. Review and submission of monthly reports and monthly audits was also a requirement of the position.



# Johanna Ithindi

## ENVIRONMENTAL GRADUATE



Hello! :)

### ABOUT ME

**Name**

Johanna Ithindi

**Born**

08 November 1990

**Phone**

+264 81 693 1329

**Email**

johanna@eccenvironmental.com

**Website**

www.eccenvironmental.com

Contact me!

### HOW TO REACH ME

+264 81 693 1329 

+264 81 693 1329 

### REFERENCES

**JESSICA MOONEY**  
Environmental and Safety Consultant

**NNENESI KGABI**  
Professor  
Namibia University of Science and  
Technology



### Education & Qualifications

Namibia University of  
Science and  
Technology,  
Namibia  
2016

Master of Integrated Water Resources  
Management

Polytechnic of Namibia  
2014

Bachelor of Environmental Health Sciences



### Experience & Work History

June 2018-  
Present

**Environmental Graduate**

- Environmental Compliance Consultancy
  - Draft and develop the best practice mining guide for the Namibian mining sector
  - Environmental Assessment activities
  - Participate in environmental requirements of projects, including licences, monitoring and reporting

Jun 2016 –  
Feb 2017

**Research Intern**

- Namibia University of Science and Technology
  - Collection and management of research data
  - Data analysis and report writing
  - Organize workshops for stakeholders

Mar 2016 –  
Jun 2016

**Research Assistant**

- Namibia University of Science and Technology
  - Coordinate project activities for the Environmental Engineering Master Programme,
  - Assisting staff in the department with research activities.
  - Compiling and documentation of program material.

Feb 2014 –  
Dec 2014

**Laboratory Technologist**

- Polytechnic of Namibia
  - Coordinate student trips and excursions, tutor and Prepare practical for students
  - Procurement of laboratory equipment and consumables
  - Coordinate and ensure the placement of students for Work Integrated Learning (WIL)

### Words I live by:

*'You only fail when you stop trying'*













**APPENDIX C: EVIDENCE OF REGISTERED POST**

**LIST OF REGISTERED ITEMS POSTED**

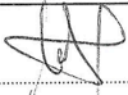
by Environmental Compliance Consultancy

P.O. BOX 91193  
Windhoek Namibia



Sender's reference no.	Addressee's name and address	Registration no.
1	To: Mr EGGERT JACOBUS P.O. BOX 30362 PIONEERSPARK, NAMIBIA	 RR 012180392 NA
2	To: Ms AMMON ROSINE ELISE P.O. BOX 643 OTJWARONGO, NAMIBIA	 RR 012180401 NA
3	To: Mr POTGIETER P.O. BOX 423 OTJWARONGO, NAMIBIA	 RR 012180415 NA
4	To: MR. EGGERT B. HAGEN FARM EGGERT & ASKEVOLD S P.O. BOX 80, OTAVI, NAMIBIA	 RR 012180429 NA
5	To: MR REIFF KARL - HEINZ NEUWERK AND DAMBECK FARMS P.O. BOX 65, OTAVI, NAMIBIA	 RR 012180432 NA
6	To: MR KRUGER JOHANNES P.O. BOX 96 OTAVI, NAMIBIA	 RR 012180446 NA
7	To: MS FALK JUANITA CATARIN P.O. BOX 1 OTAVI, NAMIBIA	 RR 012180450 NA
8	To: MR. PFAUTSCH ALBERT P.O. BOX 1 OTAVI, NAMIBIA	 RR 012180463 NA
9	To: MR HELMUT KURT P.O. BOX 22 OTAVI, NAMIBIA	 RR 012180477 NA
10	To: MR. EGGERT GEMOT. H FARM DAMDECK & ALTONA P.O. BOX 82, OTAVI, NAMIBIA	 RR 012180485 NA
11	To: MR. DIEKMANN R. W. GUST P.O. BOX 30 OTAVI, NAMIBIA	 RR 012180494 NA
12	To: MR. ZENSI PETER FARMS HAMBURG & HARTEBERG P.O. BOX 39, GROOTFONTEIN, NAMI	 RR 012180503 NA

studio print 13647

Number of items 12 Received by 

Date stamp



No compensation will be considered unless enquiry regarding this postal article is made within one year after the date of posting.

✉ info@eccenvironmental.com  
💻 www.eccenvironmental.com  
☎ +264812627872  
📱 +264816531214



REFERENCE: ECC-88-189-LET-03-D  
25<sup>th</sup> of February 2019

Identified Stakeholder and or Potentially Interested Party for:  
Votorantim Metals Namibia Exploration Activities on EPL 6927

Dear Sir or Madam:

**RE: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR EXPLORATION ACTIVITIES ON EPL6927 FOR BASE, RARE AND PRECIOUS METALS, AND INDUSTRIAL MINERALS, OTJOZONDJUPA REGION, NAMIBIA.**

Environmental Compliance Consultancy (ECC) has been engaged by Votorantim Metals Namibia (Pty) Ltd (the Proponent) to act on their behalf for the Environmental Clearance Certificate application for the proposed exploration activities for base, rare and precious metals and industrial minerals on EPL6927, Otjozondjupa Region, Namibia.

ECC is conducting the Environmental Impact Assessment (EIA) in accordance with the Environmental Management Act, 2007.

The proposed project is to conduct mineral exploration activities on EPL 6927. As part of the proposed low impact, non-intrusive exploration project, the following activities are envisaged, which shall be confirmed as the exploration program is refined:

- Potential creation of access tracks, where existing tracks are not available or cannot be utilised;
- Limited vegetation clearing for the potential creation of tracks;
- Drilling of exploration boreholes;
- Exploration methods may include soil and rock sampling, electromagnetic surveys, drilling and drill-core sampling; and
- Transport and storage of soil, rock and drill-core (all mineral) samples.

This letter is intended to engage stakeholders and potentially Interested and Affected Parties (I&APs) of the project and provide a communication channel to ECC, the environmental consultants for the project. You have been identified as either a stakeholder, interested or affected party, therefore ECC wishes to provide you with the details as to how you can become involved in the project.

---

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

✉ info@eccenvironmental.com  
🌐 www.eccenvironmental.com  
☎ +264812627872  
📱 +264816531214



Public participation is an important part of the EIA process, as it allows public and stakeholders to obtain information about the proposed project. Public participation occurs at various stages throughout a project lifecycle including:

- Advertising in newspapers.
- Distributing a Non-Technical Summary (NTS) to identified stakeholders and I&APs.
- Registered I&APs will also be informed of the available draft scoping report for a 14 day comment and review period, during this period I&APs will have the opportunity to review the draft document and raise any issues or concerns.
- Stakeholders and I&APs who wish to register as an I&APs must do so on the ECC website as per the link provided below: <https://eccenvironmental.com/projects/>

If you are unable to complete the registration form online please email [info@eccenvironmental.com](mailto:info@eccenvironmental.com) and request an electronic copy of the form that you can complete, sign, scan and return via email to [info@eccenvironmental.com](mailto:info@eccenvironmental.com) to register as an I&AP for the project.

ECC values community input and participation in our projects and we look forward to working with you as the project develops.

The Non-Technical Summary (NTS) can be obtained from our website (or emailed to you upon request) and provides a brief overview of the proposed project <https://eccenvironmental.com/project/BID>

Should you have any questions or require additional information please do not hesitate to contact either Mr. Stephan Bezuidenhout or Mrs. Jessica Mooney.

Yours sincerely,



Stephan Bezuidenhout

**Environmental Compliance Consultancy**

**Office: +264 81 669 7608**

Email: [stephan@eccenvironmental.com](mailto:stephan@eccenvironmental.com)



Jessica Mooney

**Environmental Compliance Consultancy**

**Office: +264 81 669 7608**

Email: [jessica@eccenvironmental.com](mailto:jessica@eccenvironmental.com)

# APPENDIX D: EVIDENCE OF PUBLIC CONSULTATION

THE NAMIBIAN

mOshiwambo

THURSDAY 14 FEBRUARY 2019 23



Ethano: Henry van Rooi

**TAA KONDJELE OMEYA ...** Aakalimo yomolukanda Goreangab ya ngundumanena okapomba komeya unambo.

## Aakiintu yaali ya dhipagwa koohonda

**A**akiintu yaali ya dhipagwa koohonda OTAKU hokolola aakiintu yaali ya dhipagwa kaaholike yawo, manga kwa thiminkilwa mihiulo okakadhona komimvo hetatu. Ndhika odha popiwa kopolosi. Otaku hokololwa kutya omudhimba gwaFelisia Ndamononghenda Petrus (25) ogwa adhika ombete ongula yEtitano molukanda Goreangab moWindhoek, gu na omeleka dhomuntu a fa pondwa mothingo.



Nakufekelwa edhipago lyaFelisia Ndamononghenda Petrus

Pahokololo, Petrus okwadhipagwa komulumentu gwe, ihe ka li a mangwa po pethimbo linyanyangidho lyehokololo ndika. Pamahokololo, omufekelwa omukwashigwana gwaAngola nokwa ka kongu uuhloameno koshilongo shaandjawa. Opolosi otayi mu kongo noya hala oshigwana shi yi kwaথে moku mu konga.

lyoshinyolwa shika, omufekelwa ka li a mangwa po molwashoka okwa ya ontuku.

Moshiningwanima sha yooloka, otaku hokololwa omukiintu a tsuwa nombe iikando itatu komulumentu kee shiwike ongulohi yOlyomakaya komukunda Okatope moshitopolwa Ohangwena.

Omukiintu okwe ehamekwa noonkondo, nokwa fafelwe meendeleo koshipangelo kEngela.

Shika osha ningilwa moWanaheda ongulohi yOlyomakaya. Palopota yopolosi, Patricia Hochoebes nomufekelwa oya li taa nyenyeta manga oshiponga inashi holoka.

Omufekelwa naye okwa ka monika lwanima, a adhika e na oshilalo mokwaako kokolumoho, nokwa falwa naye moshipangelo mEngela.

Omufekelwa okwa mangwa, naapolosi ota kongo uyelele. Ota kundana wo okakadhona komimvo hetatu ka thiminkilwa mihiulo mEtitano lya zi ko komukunda Otjondjupa moOshikoto.

Okakadhona oka kwatwa koonkondo komufekelwa gwomimvo 19.

Pahokololo, okakadhona oka li negumbo sho omufekelwa, naye ha zi megumbo moka, e ka nana mo megumbo komatha e ta ka lala nako koonkondo mihiwa.

Omufekelwa naye okwa ka monika lwanima, a adhika e na oshilalo mokwaako kokolumoho, nokwa falwa naye moshipangelo mEngela.

Pethimbo linyanyangidho

Omufekelwa naye okwa ka monika lwanima, a adhika e na oshilalo mokwaako kokolumoho, nokwa falwa naye moshipangelo mEngela.

no51 otaku hokololwa ya adhika nuupaki 56 wiingangamithi komweelo gwaKlein Manase.

Nando ongaaka, ongushu yayo inayi kolekwa. Aafekelwa ayehe oya mangwa po noya holokele mompangu unambo.

Omukeleli gwomaliko okwa li a mangwa noku wu toolithwa mo koongangala mbala kOngwediva mEtitano lya zi ko.

Palopota yopolosi, aafekelwa oyi iteyele mongeshafa.

Oya patulula omashina gokundombola ge li gaali e taa kuttha mo N\$5 300, osho wo ombistoli ya li mombelewa.

Kapu na ngoka a tulwa miipandeko.

Otaku hokololwa wo omuhingi gwokahauto kiipundi iheyali a nyengwa oku ka kondolola konima sho okugulu kokonima kwa topa.

Shika osha ningilwe mOlyomakaya komukunda Opepla mOhangwena. Aafekelwa yaali mboka ya li oye ehamekwa noonkondo, ihe omuhingi, omumamimvo 73, okwa li ehamekwa shi vilithe nokwa ka sila koshipangelo kOkongo.

Omuhingi gwokambesa okawolswagen, e na omimvo 77, okwi ipumu moToyota Land Cruiser yali tayi hingwa komulumentu gwomimvo 49, tuku fekelwa li a kolwa.

Shika osha ningilwa moGrysblok moWindhoek.

Okanona, hoka ka li mokambesa, oka ehamekwa noonkondo noka li ka taambelewa moshipangelo shaKatutura, manga aafaalelwa yakwawo yaali ye li mokangulu kiifudhitho ihe onkalo oyo otayi etitha onkondo.

Omufekelwa okwa tulwa miipandeko nokwa li kwa tegelelwa a holoke mompangu yamangestrata moKatutura.

## AaGoreangab taa dhengwa kenota

**A**AKALIMO yomolukanda Goreangab moshilandopangelo shaNamibia, Windhoek, oya ninga omasiku gaali yaa na omeya, konima sho omunino ngoka gwa fala omeya momudhingoloko gwawo gwa topele mOmaandaha. Iihuna okonyala yi hunuke mOkahumba Kandola, sho aakalimo ya li taa kondjele omeya okapomba komomudhingoloko, kashi ashike ke na omeya taga ndonda kashona nakashona unambo. "Opwa li evundakano okapomba haka ongula. Otwa li nokuli twi ithana anambelewa yamuni opo ya pate okapomba, ihe inaa ya," gumwe gwomaakalimo, Sandra Tatana ta ti. Aakalimo otaa myenyeta kutya kaa na omeya gokwiyoga, okuteleka nokwina.

awuhe utano womomudhingoloko mu na ashike okapomba kamwe oko taka ndonda. Otatu kala ngini inatu lwa?" Nuses ta pula. Mervin Garoeb okwi indile epangelo li nawa-peke oonkalelo dhaakalimo yomomalukanda. "Aantu ohatu ya hogolola ye tu yakule, ihe okuza pemanguluko, sigo onena onkalo yetu inayi lunduluka. Otwa hala okumona omalunduluko momudhingoloko muka," ta ti ngaaka. Omupopiliko gwelelo lyoshilandopangelo, Lydia Amutenya, okwa popile unambo kutya aakalimo yomomalukanda Havana na Goreangab oyo ya gumwa ketopo lyomunino gwomeya. "Opu na omunino omunene gwa topa momudhingoloko, nosha gumu omudhingoloko aguhe gwaHavana nogwa Goreangab. Otwa tameleke oku gu pangela ohela [unambo] ongula, onkene aakalimo oye na okukala ya mona omeya," Amutenya ta ti ngaaka. Okwa gwedha po kutya onkalo ndjoka oyo wo ya li moRocky Crest, ihe uupyakadhi mboka owa potokononwa meendeleo.

**ENVIRONMENTAL COMPLIANCE CONSULTANCY**

**NOTICE OF ENVIRONMENTAL ASSESSMENT**  
**EXPLORATION ACTIVITIES ON EPL6927**  
**OTJONDJUPA REGION, NAMIBIA**

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an Environmental Clearance Certificate in accordance with the Environmental Management Act, 2007 will be made as per the following:

**Applicant:** Votorantim Metals Namibia (Pty) Ltd  
**Environmental Assessment Practitioner (EAP):** Environmental Compliance Consultancy  
**Location:** Otjondjupa Region, Namibia

**Project:** Exploration activities on EPL6927 for base, rare and precious metals and industrial minerals, Otjondjupa Region, Namibia.  
**Proposed Activity:** The proponent proposes to carry out low impact, non-intrusive exploration activities for base, rare and precious metals and industrial minerals on EPL6927. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys), drilling and drill-core sampling.  
**Application for Environmental Clearance Certificate:** In terms of the Environmental Management Act, 2007 (No. 7 of 2007), ECC on behalf of Votorantim Metals Namibia (Pty) Ltd is required to apply for Environmental Clearance Certificate to the Competent Authority and the Ministry of Environment and Tourism.  
**Review Period:** The review and comment period is effective from: 14/02/2019 to 28/02/2019  
**How you can participate:** To ensure that all potential issues and concerns are included in the assessment, Interested and Affected Parties (I&APs) and stakeholders are requested to register for the project using the website provided and have the opportunity to leave all comments considered and captured in the assessment.

Environmental Compliance Consultancy Close Corporation  
Registration Number: CC2013/1404  
Members: Mr. JS Bezuidenhout and Mrs. J. Mooney  
PO Box 91193, Klein Windhoek  
Tel: +264 616 597 026  
E-mail: info@eccenvironmental.com  
Website: https://www.eccenvironmental.com/eng/eng  
Project ID: ECC-88-189

**Votorantim Metals**

**DHPS**  
Deutsche Höhere Privatschule Windhoek

Wir suchen ab Juli 2019 eine/n  
**Vorschulleiter/in**

Sie sollten Freude an der Arbeit mit Kindern unter 6 Jahren haben sowie daran, gemeinsam mit dem Team die pädagogische Arbeit zu gestalten und konzeptionell weiterzuentwickeln.

**Was wir uns von Ihnen wünschen:**

- Engagement
- Reflexionsfähigkeit, Kreativität, Flexibilität
- Organisationsgeschick

**Ihr Profil:**

- Sie haben eine abgeschlossene Ausbildung als Erzieher/in oder ein entsprechendes Studium oder einen vergleichbaren anerkannten landestypischen Abschluss
- Sie verfügen bereits über Leitungserfahrung
- Die sichere Beherrschung der deutschen und englischen Sprache sowie der Umgang mit elektronischen Medien wird als selbstverständlich vorausgesetzt

Die Deutsche Höhere Privatschule bietet Ihnen einen Arbeitsplatz in einem engagierten Team, ein leistungsgerechtes Gehalt sowie Beiträge zur Kranken- und eine Rentenversicherung. Bei Interesse richten Sie bitte Ihre aussagekräftige Bewerbung mit vollständigem Lebenslauf und Lichtbild an:

**Die Personalabteilung**  
P.O. Box 78, Churchstrasse 11 – 15  
Windhoek

**Bewerbungsschluss: 20. März 2019**  
Fax: 061-221 306  
Email: hr@dhps-windhoek.com

# Omukiintu a hulitha konima sho a li ondjuhwa

**O**MUKALIMO gwok-oRehoboth, omukiintu, otaku hokololwa a mana oondjenda konima sho a li ondjuhwa ya telekwa kukume ke.

Pamushangwahokololo gwiilonga yiimbuluma, ngoka gwa pitithwa kukomufala gwopevi metanga lyopolosi yaNamibia, Edwin Kan-guatjivi, omunamimvo 52 Fresiano Hamunyela, okwa li ta dhenge omandoli naku-ume ke poondingosho mbali koBlikkiesdorp moRehoboth lwoopotundi 20h00.

Konima sho a li ondjuhwa, otaku hokololwa kutya okwa tameke ta nyenyeta kutya oku uvite ta pi mepunda ya ta kungu.

Ngula sho kuume ke a

penduka, okwa adha a sa. Moshiningwanima oshikwawo, otaku hokololwa omupolosi Desderius Ashiyana, ha longele kOshikango, e ehamekwa noonkondo sho a tsuwa nombele montulo lwiikando iyali.

Otaku hokololwa kutya omufekelwa okwa li a ningile Ashiyana amatilitho manga ine mu tsa.

Omupolosi okwa falwa meendelelo koshipangelo shepangelo kEngela, nokwa lundululilwa kOshakati.

Omufekelwa okwa tulwa miipandeko. Otaku hokololwa omulumentu, ta fekelwa a fa kee li nawa momutse, i ikutha omwenyo konima sho i itome-kele omulilo mondunda ya

koHardap omutenya gwOly-omakaya.

Nakusa okwa dhimbululwa, oye omunamimvo 46 Frans van Wyk.

Aapambele ye oya tseyith-ilwa nale eso lye.

Omukalimo gwomGore-angab moshilandopangelo shaNamibia, ngoka a li ta tyaya iikuni, otaku hokololwa i itsu momudhimba gwomun-utu gwa yonuka gwe endjelela momuti ongula yoOlyoma-kaya.

Nakusa, omunamimvo 20 Erastus Shikongo, otaku hokololwa a li ta kongwa kopolosi shi na sha nesu lyohonda ye, ndjoka ya dhipagelwe mu8 Febuulali numuvo.

Aapambele ye oya tseyith-ilwa nale eso lye.

**VKE NAMIBIA (Pty) Ltd**  
CONSULTING ENGINEERS  
(Part of the SMEC Group)

## VACANCY

Applications are hereby invited for appointment in the following vacancy

### ENGINEERING SURVEYOR/ SENIOR TECHNICAL ADVISOR

- **Minimum requirements in qualification and experience:** A technical qualification and registration in Surveying and Civil Engineering
- 30 years experience in civil engineering design and construction including municipal services, rural roads and bridges
- Drainage calculations, culvert design and setting out
- Full contract documentation (COLTO, FIDIC and AfDB STANDARD PROCUREMENT DOCUMENTS)
- Completion of contract bids
- Evaluation of tenders
- Contract supervision at the level of Resident Engineer
- **Key Responsibilities:** Setting out of road alignment and structures, checking levels and co-ordinates, measuring and calculation of quantities (COLTO Specifications), preparing payment certificates, checking compliance with environmental specifications, IRL road roughness measurements, bid evaluations, contract design and completion reports.

Suitable candidates are hereby invited to submit applications with CV to:

The Personnel Manager, VKE Namibia Consulting Engineers Box 45  
Windhoek (54 Bismarck Street), Namibia.  
bassons@vkewhk.com

**CLOSING DATE :**  
Tuesday 5 March 2019

# NFA oku na oshimaliwa sha gwana

**W**INDHOEK – Omunashipundi gwokakomitiye kowina hoka ka tulwa po kehngano lyoFifa opo ka dhime omulilo mongongahngano yokatanga kokoompadhi moNamibia, Namibia Football Association (NFA), Hilda Basson-Namundjembo, okwa ti NFA oku na oshimaliwa sha gwana okugwanitha oompumbwe adhihe dhokatanga kokoompadhi moshilongo.

Moonkundathana nonzonkundana yoNampa omasiku ngaka, Basson-Namundjembo, okwa ti NFA oku na oshimaliwa sha gwana okugwanitha po iilonga ye pwaaw na eyambidhidho lye pangelo.

Epangelo, Basson-Namundjembo ta ti, kali na okugandja oshimaliwa ko-NFA molwashoka oku na nale oshimaliwa sha gwana.

Ehangano lyo-NFA oli na oshiketha sha kola, ashike ihali ndjandjukurunine aafutuli yalo elongitho lyiimiliwa, Basson-Namundjembo ta ti.

Okwa tsikile ko ta ti epangelo otashi vulika lya hoywa mo momwaa lu gwoshimaliwa shoka hali gandja kokomisi yomaudhano moshilongo, ndoka oyo hayi topolele omahngano gomaudhano ga yooloka moshilongo oshimaliwa, ihe chngano ndika oli na oonzo dhilwe dhoshimaliwa, shoka tashi vulu okulongithwa miinyangadhalwa ayihe yehngano.

“Ngele ku na olopota yelongitho lyiimiliwa uule womvula, oto ka ya kulye wu ka konge oshimaliwa ngele iho vulu okukalela po elongitho lyiimiliwa mbyoka wa pewa?” Basson-Namundjembo ta pula, ta gwedha po kutya aantu itaa vulu okukala taa kongo iimaliwa kepangelo omanga hali longitha nale oshimaliwa oshindji nomwa pumbwa okuhooya.

Omunashipundi gwokakomitiye kowina okwa ti otaa ka tsakanena nomunambelewa gwokakomitiye kowina ko-NFA, Timothy Tjongarero, mEtiyali opo ya kundathane iinima ya pamba oosipana dhopashigwana dha yooloka, osho wo iilonga yokulongeki-dhila osipana onene yopashigwana yetanga lyokoompadhi ethigathano lyoku ka kondjela ekopi lyiigwana yaAfrica, sho tayi ka thigathana po naZambia mo23 Maalitsa koshilongo hoka.

Nando uudhano moshilongo owa li wu na ngeno okutameka petameko lyomumvo, inawu tameka natango, molwashoka kapu na oshimaliwa.

Sigo uunambo, aanambelewa yo-NFA kaya li ya mona ondjambo dhawo dhomwedhi Januari.



Hilda Basson-Namundjembo

**Bank of Namibia**

### REQUEST FOR PROPOSAL

**Reference:**  
RFP No. 01/2019

**Description of Services:**  
Provision of consultancy services to conduct the Bank of Namibia External Stakeholder Perception Survey 2019.

**Terms of Reference:**  
The terms of reference for the above RFP are obtainable from the Bank of Namibia's website – [www.bon.com.na](http://www.bon.com.na)

Interested experienced service providers should submit their proposal/quotations to the following email address: [sandra.garises@bon.com.na](mailto:sandra.garises@bon.com.na) or hand deliver at Bank of Namibia, 71 Robert Mugabe Avenue, Windhoek.

**Closing date for submissions: Friday, 08 March 2019 at 12h00**  
**Enquires:**  
Ms. Sandra Garises Tel: +264 61 283 5230

**ENVIRONMENTAL COMPLIANCE CONSULTANCY**

### NOTICE OF ENVIRONMENTAL ASSESSMENT EXPLORATION ACTIVITIES ON EPL6927 OTJOZONDJUPA REGION, NAMIBIA

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an Environmental Clearance Certificate in accordance with the Environmental Management Act, 2007 will be made as per the following:

**Applicant:** Votorantim Metals Namibia (Pty) Ltd  
**Environmental Assessment Practitioner (EAP):** Environmental Compliance Consultancy  
**Location:** Otjozondjupa Region, Namibia

**Project:** Exploration activities on EPL6927 for base, rare and precious metals and industrial minerals, Otjozondjupa Region, Namibia.

**Proposed Activity:** The proponent proposes to carry out low impact, non-intrusive exploration activities for base, rare and precious metals and industrial minerals on EPL6927. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys), drilling and drill-core sampling.

**Application for Environmental Clearance Certificate:** In terms of the Environmental Management Act, 2007 (No 7 of 2007), ECC on behalf of Votorantim Metals Namibia (Pty) Ltd is required to apply for Environmental Clearance Certificate to the Competent Authority and the Ministry of Environment and Tourism.

**Review Period:** The review and comment period is effective from: 14/02/2019 to 28/02/2019

**How you can participate:** To ensure that all potential issues and concerns are included in the assessment, interested and affected parties (I&APs) and stakeholders are requested to register for the project using the website provided and have the opportunity to have all comments considered and captured in the assessment.

Environmental Compliance Consultancy Close Corporation  
Registration Number: CC/2013/11404  
Members: Mr JS Bezuidenhout and Mrs J Mooney  
PO Box 91193, Klein Windhoek  
Tel: +264 616 697 608  
E: [info@ecc.com.na](mailto:info@ecc.com.na)  
Website: <https://www.ecc.com.na>  
Project ID: ECC-88-189



**ECC Stakeholder Map - Votorantim Metals EPL 6927**

Date	Farm or portion number	Stakeholder Type	Farm Name	Deed ID Number	Area (ha)	Title	Surname	First Name	Company	Address	Interest/How stakeholder is affected by Project	Potential Influence on Project	Level of Engagement (Inform, Consult, Involve, Collaborate, Empower)	Methods of Engagement	Engagement Schedule	Email	Phone	Comments
25.01.2019	806	Directly Affected	EGGERT	FMB/00806	745.9	Mr	EGGERT	Hagen		P.O Box 80 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019
25.01.2019	651	Indirectly Interested or Affected	JUDITHOR	FMB/00651	279.9	Mr	EGGERT	Hagen	ASKEVOLD INVESTMENTS CC	P.O Box 80 Otavi	Land Owner	Opportunity to provide local support for project	Inform/Consult	Public Meeting	Monthly as required	hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019
25.01.2019	816	Indirectly Interested or Affected	NAWEIS	FMB/00816	632.4	Mr	EGGERT	Hagen		P.O Box 80 Otavi	Land Owner	Opportunity to provide local support for project	Inform/Consult	Public Meeting	Monthly as required	hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019
	316		ASKEVOLD	FMB/00316	1922	Mr	EGGERT	Hagen	ASKEVOLD INVESTMENTS CC	P.O Box 80 Otavi	Land Owner					hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019
25.01.2019	793	Directly Affected	ELEFANTENBERG NORD	FMB/00793/00001	1841.7	Mr	FREYER	Hartmut			Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hwfreyer@mweb.com.na	081 3374333	No answer to email from 26/02/2019
25.01.2019	566	Indirectly Interested or Affected	DEVON SUID	FMB/00566/00001	211.9	Mr	LINDE	Bernardus (Barrie)		P.O Box 37 Otavi	Land Owner	Opportunity to provide local support for project	Inform/Consult	Public Meeting	Monthly as required	enalinde@gmail.com	067 234462 / 067 234613	No answer to email from 26/02/2019
25.01.2019	792 (794?)	Directly Affected	ELEFANTENBERG WEST	FMB/00792	1359.7	Ms	FREYER	Hartmut			Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hwfreyer@mweb.com.na	081 3374333	No answer to email from 26/02/2019
25.01.2019	503	Indirectly Interested or Affected	OMUHONA	FMB/00503	3191.5	Mr	BOTHA	David	Omuhona Farming (PTY) LTD		Land Owner	Project support (technical, social etc)	Inform/Consult	Public Meeting	Monthly as required	odusa@iway.na	081 1284844	Raised concern about aerial exploration activities over his farm. No answer to email from 26/02/2019
25.01.2019	506	Directly Affected	HOHENTWEIL NORD	FMB/00506/00001	1257.6	Ms	Falk	Juanita Catarina & Wolfgang		P.O Box 1 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	ondjondjo@iway.na	081 2774295 / 081 2421146	Frequent hunting guests. Troubled about having other people on the farm again. Will inform themselves and see what they can coordinate once exploration starts on their farm. No answer to email from 26/02/2019
25.01.2019	525	Directly Affected	ASKEVOLD SÜD	FMB/00525	1812.7	Mr	EGGERT	Hagen	ASKEVOLD INVESTMENTS CC	P.O Box 80 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Collaborate/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019

**ECC Stakeholder Map - Votorantim Metals EPL 6927**

Date	Farm or portion number	Stakeholder Type	Farm Name	Deed ID Number	Area (ha)	Title	Surname	First Name	Company	Address	Interest/How stakeholder is affected by Project	Potential Influence on Project	Level of Engagement (Inform, Consult, Involve, Collaborate, Empower)	Methods of Engagement	Engagement Schedule	Email	Phone	Comments
25.01.2019	507	Directly Affected	NEUWERK	FMB/00507	3354.1	Mr	REIFF	Karl-Heinz	Orban Investments Eleven cc	P.O Box 65 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	karlhreiff@gmail.com	081 2689734 / 067 234355	No answer to email from 26/02/2019
25.01.2019	505	Directly Affected	ONDJONDJO	FMB/00505	2753.2	Mr & Mrs	FALK	Juanita Catarina & Wolfgang		P.O Box 1 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	ondjondjo@iway.na	081 2774295 / 081 2421146	Frequent hunting guests. Troubled about having other people on the farm again. Will inform themselves and see what they can coordinate once exploration starts on their farm. No answer to email from 26/02/2019
25.01.2019	508	Directly Affected	HARTEBEESSPOORT	FMB/00508	3670	Mr	ZENSI	Peter		P.O Box 39 Grootfontein	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	pezet@iway.na	067 234464	No answer to phone call. No answer to email from 26/02/2019
25.01.2019	509	Directly Affected	EISENBERG	FMB/00509	3080.7	Mr	KRUGER	Johannes		P.O Box 96 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	Has no email address	081 3999801	Call when on site and bring physical copy of NTS. No answer to email from 26/02/2019
25.01.2019	510	Indirectly Interested or Affected	NORDLAND	FMB/00510	2966.8	Mr	SCHOLTZ	Niels		P.O. Box 12 Otavi	Land Owner	Opportunity to provide local support for project	Inform/Consult	Public Meeting	Monthly as required	nielsscholtz@gmail.com (d	081 3997100	Reluctant to share email address, which ended up not being correct.
	510	Directly Affected	NORDLAND SUID			Mr	DE JAGER	Koos			Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	santatol@iway.na	067 231572	No answer to email from 26/02/2019
25.01.2019	791	Directly Affected	ALTONA	FMB/00791/00REM	1656.4	Mr	EGGERT	Jacobus (Hagen?)		P.O Box 30362 Pioneerspark (PO Box 80 Otavi?)	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hagen@omatjete.com	081 4355505 / 067 234465	No answer to email from 26/02/2019
25.01.2019	791	Directly Affected	ALTONA	FMB/00791/00002	2325	Mr	EGGERT	Gemot H	GH EGGERT INVESTMENTS	P.O Box 82 Otavi	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	hagerem@gmail.com	081 1247694	No answer to email from 26/02/2019

MARCH 2019

PAGE 20 OF 28

**ECC Stakeholder Map - Votorantim Metals EPL 6927**

Date	Farm or portion number	Stakeholder Type	Farm Name	Deed ID Number	Area (ha)	Title	Surname	First Name	Company	Address	Interest/How stakeholder is affected by Project	Potential Influence on Project	Level of Engagement (Inform, Consult, Involve, Collaborate, Empower)	Methods of Engagement	Engagement Schedule	Email	Phone	Comments
25.01.2019	1254	Indirectly Interested or Affected	SEGEN	FMB/01254	5878.9	Mr	VON MALTZAHN	Jochen	Segen Farming (Pty)Ltd	P.O Box 63 Otavi	Land Owner	Opportunity to provide local support for project	Inform/Consult	Public Meeting	Monthly as required	jochenvm@iway.na	0811487453 / 0813496042 / 067 231015	No answer to email from 26/02/2019
25.01.2019	584	Directly Affected	ELEFANTENBERG	FMB/00584	1836.3	Mrs	BÖHLKE	Ulrike			Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	ubo@iway.na	081 2124347	No answer to email from 26/02/2019
25.01.2019	504	Directly Affected	HAMBURG	FMB/00504	3161.7	Mr	ZENSI	Peter		P.O Box 39 Grootfontein	Land Owner	Social Licence to operate, influence operating conditions, public perception, business sustainability	Involve/Empower	Newsletter, meetings, door knock, letter drop, open day, observation area, newspaper	Daily when operating on their land	pezet@iway.na	067 234464	No answer on phone. No answer to email from 26/02/2019
	511		DAMBECK	FMB/00511/0000A	997.2	Mr	REIFF	Karl-Heinz	MIERSCH (Orban Investments Eleven cc)	P.O Box 65 Otavi	Land Owner					khreiff@gmail.com	081 2689734 / 067 234355	No answer to email from 26/02/2019
	511		DAMBECK	FMB/00511/0000B	999.8	Mr	EGGERT	Gemot H	PFEFFELBACH INVESTMENTS CC	P.O Box 82 Otavi	Land Owner					gheggert@gmail.com	811,247,694	No answer to email from 26/02/2019
	511		DAMBECK	FMB/00511/0000REM	105.9	Mr	EGGERT	Gemot H	EGGERT (Pfeffelbach Investments cc)	P.O Box 82 Otavi	Land Owner					gheggert@gmail.com	811,247,694	No answer to email from 26/02/2019
28.01.2019	NA	Authorities (National)	Government of Namibia	NA	NA	NA		NA	MINISTRY OF ENVIRONMENT AND TOURISM	P/Bag 13306 Windhoek	Licensing authority	Licence approval/disapproval	Inform/Consult	Various	Annual or as required		+264 61 284 2111	
28.01.2019	NA	Authorities (National)	Government of Namibia	NA	NA	NA		NA	MINISTRY OF MINES AND ENERGY	P/Bag 13297 Windhoek	Licensing authority	Licence approval/disapproval	Inform/Consult	Various	Annual or as required	info@mme.gov.na	+264 61 284 8111	
28.01.2019	NA	Authorities (Regional)	Government of Namibia	NA	NA	NA		NA	OTJONDJUPA REGIONAL COUNCIL	P.O.Box 2091 Otjivarongo	Licensing authority	Licence approval/disapproval	Inform/Consult	Various	Annual or as required		+264 67 302 646/38/58	

**Monday, March 18, 2019 at 5:02:54 PM Central Africa Time**

**Subject:** Stakeholder information - proposed exploration activities by Votorantim Metals Namibia (Pty) Ltd  
**Date:** Tuesday, 26 February 2019 at 20:38:05 Central Africa Time  
**From:** Oliver Freyer  
**CC:** Stephan Bezuidenhout, Jessica Bezuidenhout (Mooney)  
**BCC:** hagen@omatjete.com, hwfreyer@mweb.com.na, enalinde@gmail.com, odusa@iway.na, ondjondjo@iway.na, karlhreiff@gmail.com, pezet@iway.na, nielsscholtz@gmail.com, santatol@iway.na, ubo@iway.na, gheggert@gmail.com, jochenvm@iway.na, E Freyer  
**Attachments:** ECC-88-189-BID-03-D NTS.pdf, Frequently Asked Questions and Answers.pdf, Electromagnetic surveys.pdf, Soil samples.pdf, image001.png

Dear Stakeholder

**Re: proposed exploration activities on EPL 6927 by Votorantim Metals Namibia (Pty) Ltd**

Environmental Compliance Consultancy (ECC) is conducting an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for exploration activities by Votorantim Metals Namibia (Pty) Ltd, in terms of the Environmental Management Act of 2007 and its regulations.

ECC is a team of dedicated consultants with expertise in the environmental, social, health and safety fields in various industries. As independent consultants, we have no vested or financial interest in the exploration activities by our client.

Votorantim is a company with decades of experience in exploration, who are committed to preserving the environment and having a positive impact on society. Part of this commitment involves transparency of their activities, and a good and respectful relationship with the local community.

The Exclusive Prospecting Licence (EPL) 6927 is on an area within a number of farms to the South East of Otavi, whose owners have been identified and included in this email, in addition to farms that are bordering the EPL. Exploration activities will be low-impact and non-intrusive, and may include soil and rock sampling, geological mapping, electromagnetic surveys and drill-core sampling. Limited vegetation might have to be cleared for the creation of tracks where no existing tracks can be used. More information, as well as a map of the involved farms showing electromagnetic survey and soil sampling area, is provided in the Non-Technical Summary (NTS), frequently asked questions and answers, and maps attached to this email.

It is important to note that Votorantim will contact and inform the land owners before starting exploration on any farms, in order for them and the land owners to meet specific agreements. These agreements will respect the interests of both parties, allowing exploration activities to be undertaken while protecting the rights of the land owner.

ECC encourages interested and affected parties (I&APs) to read the NTS and register on our website at the following link in order to follow and be involved in the EIA process.

<https://eccenvironmental.com/project/exploration-activities-on-epl6927-for-base-rare-and-precious-metals-and-industrial-minerals-otjondjupa-region-namibia/>

We will be in the vicinity of Otavi on Thursday the 28th February and Friday 1st March this week, and will be able to arrange a meeting to address potential questions and concerns regarding the proposed exploration activities. Please contact us via the details provided below, if you would like to arrange a meeting.

Kind regards,

**Oliver Freyer**

**Environmental Consultant and Practitioner - Intern**  
**Environmental Compliance Consultancy (ECC)**

Mobile: +264 81 421 4092  
Office: +264 81 669 7608  
Address: PO BOX 91193 | Klein Windhoek | Namibia  
Email: [oliver@eccenvironmental.com](mailto:oliver@eccenvironmental.com)

Page 1 of 2

## APPENDIX E: ASSESSMENT METHODOLOGY

The evaluation and prediction of environmental and social impacts require the assessment of the project characteristics against the baseline of environmental and social characteristics and ensuring all potentially significant impacts are identified and assessed.

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. These are described as follows and thresholds provided in Tables 1 to 3.

- The **sensitivity and value of a receptor** are 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** are determined through consideration of the frequency, duration, reversibility and probability and the impact occurring, and
- 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, irreversible or permanent).

**TABLE 1 - SENSITIVITY AND VALUE OF RECEPTOR**

SENSITIVITY AND VALUE	DESCRIPTION
<b>High</b>	Of value, importance or rarity on an international and national scale, and with very limited potential for substitution; and/or very sensitive to change or has little capacity to accommodate a change.
<b>Medium</b>	Of value, importance or rarity on a regional scale, and with limited potential for substitution; and/or moderate sensitivity to change, or moderate capacity to accommodate a change.
<b>Low</b>	Of value, importance or rarity on a local scale; and/or not particularly sensitive to change or has considerable capacity to accommodate a change.

**TABLE 2 - NATURE OF IMPACT**

<b>NATURE</b>	<b>DESCRIPTION</b>
<b>Positive</b>	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
<b>Negative</b>	An impact that is considered to represent an adverse change from the baseline or introduces a new undesirable factor.
<b>Direct</b>	Impacts causing an impact through direct interaction between a planned project activity and the receiving environment/receptors.
<b>Indirect</b>	Impacts that result from other activities that are encouraged to happen as a result / consequence of the project, associated with the project and may occur at a later time or wider area.
<b>Extent / Geographic Scale</b>	
<b>On-site</b>	Impacts that are limited to the boundaries of the proposed project site.
<b>Local</b>	Impacts that occur in the local area of influence, including around the proposed site and within the wider community.
<b>Regional</b>	Impacts that affect a receptor that is regionally important by virtue of scale, designation, quality or rarity.
<b>National</b>	Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.
<b>International</b>	Impacts that affect a receptor that is internationally important by virtue of scale, designation, quality or rarity.
<b>Duration</b>	
<b>Short-term</b>	Impacts that are likely to last for the duration of the activity causing the impact and are recoverable
<b>Medium-term</b>	Impacts that are likely to continue after the activity causing the impact and are recoverable
<b>Long-term</b>	Impacts that are likely to last far beyond the end of the activity causing the damage but are recoverable over time
<b>Reversibility</b>	
<b>Permanent /Irreversible</b>	Impacts which are not reversible and are permanent
<b>Temporary / Reversible</b>	Impacts are reversible and recoverable in the future
<b>Likelihood</b>	
<b>Certain</b>	The impact is likely to occur
<b>Likely</b>	The impact is likely to occur under most circumstances
<b>Unlikely</b>	The impact is unlikely to occur

**TABLE 3 - MAGNITUDE OF CHANGE**

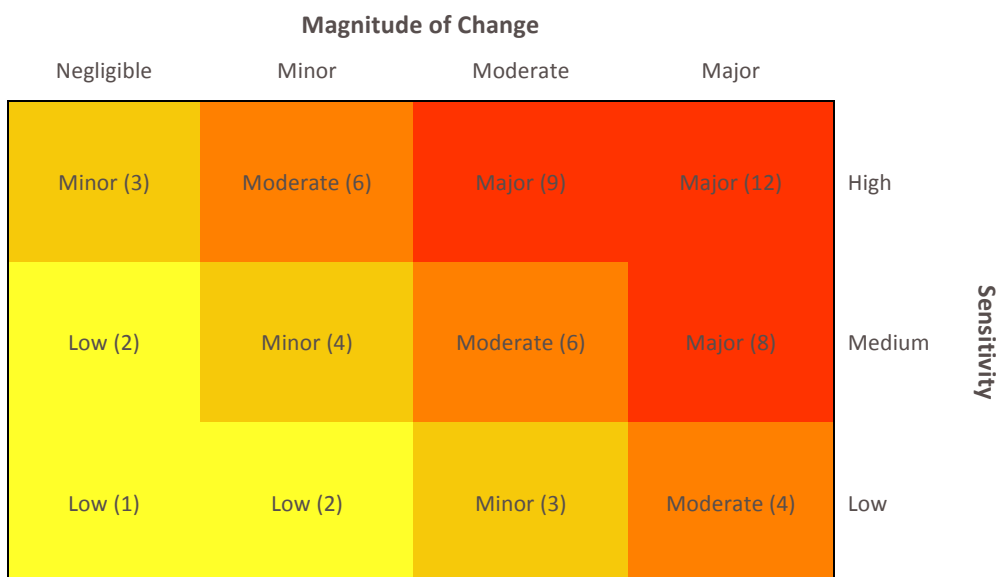
MAGNITUDE OF CHANGE	DESCRIPTION
<b>Major</b>	<ul style="list-style-type: none"> <li>- Loss of resource, and quality and integrity of resource; severe damage to key characteristics, features or elements, or</li> <li>- Large-scale or major improvement of resources quality; extensive restoration or enhancement; major improvement of attribute quality.</li> </ul>
<b>Moderate</b>	<ul style="list-style-type: none"> <li>- Loss of resource, but not adversely affecting its integrity; partial loss of/damage to key characteristics, features or elements, or</li> <li>- Benefit to, or addition of, key characteristics, features or elements; improvements of attribute quality.</li> </ul>
<b>Minor</b>	<ul style="list-style-type: none"> <li>- Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (or maybe more) key characteristic, feature or element, or</li> <li>- Minor benefit to, or addition of, one (or maybe more) key characteristic, feature or element; some beneficial effect on attribute quality or a reduced risk of a negative effect occurring.</li> </ul>
<b>Negligible</b>	<ul style="list-style-type: none"> <li>- Very minor loss or detrimental alteration to one (or maybe more) characteristic, feature or element, or</li> <li>- Very minor benefit to, or positive addition of, one (or maybe more) characteristic, feature or element.</li> </ul>

The level of certainty has also been applied to the assessment to demonstrate how certain the assessment conclusions are and where there is potential for misinterpretation or a requirement to identify further mitigation measures, thereby adopting a precautionary approach. Where there is a low degree of certainty, monitoring and management measures can be implemented to determine if the impacts are worse than predicted and support the identification of additional mitigation measures through the lifetime of the proposed project. Table 4 provides the levels of certainty applied to the assessment, as well as a description.

**TABLE 4 – LEVEL OF CERTAINTY**

LEVEL OF CERTAINTY	DESCRIPTION
<b>High</b>	<ul style="list-style-type: none"> <li>– Likely changes are well understood. Design/information/data used to determine impacts is very comprehensive</li> <li>– Interactions are well understood and documented, and</li> <li>– Predictions are modelled, and maps based on interpretations are supported by a large volume of data. Design/information/data has very comprehensive spatial coverage or resolution.</li> </ul>
<b>Medium</b>	<ul style="list-style-type: none"> <li>– Likely changes are understood. Design/information/data used to determine impacts include a moderate level of detail</li> <li>– Interactions are understood with some documented evidence, and</li> <li>– Predictions are modelled but not yet validated and/or calibrated. Mapped outputs are supported by a moderate spatial coverage or resolution.</li> </ul>
<b>Low</b>	<ul style="list-style-type: none"> <li>– Interactions are currently poorly understood and not documented</li> <li>– Predictions are not modelled, and the assessment is based on expert interpretation using little or no quantitative data, and</li> <li>– Design is not fully developed, or information has poor spatial coverage or resolution.</li> </ul>

The significance of impacts has been derived using professional judgment and applying the identified thresholds for receptor sensitivity and magnitude of change (as discussed above) and guided by the matrix presented in Figure 1. The matrix is applicable for impacts that are either positive or negative. The distinction and description of significance and whether the impact is positive or negative is provided in Table 4.

**Figure 1 – Guide to significance ratings**


Significance is not defined in the Namibian EIA Regulations, however the Draft Procedure and Guidance for EIA and EMP states that the significance of a predicted impact depends upon its context and intensity. Accordingly, definitions for each



level of significance has been provided in Table 4. These definitions were used to check the conclusions of the assessment of receptor sensitivity, nature of impact and magnitude of impact was appropriate.

**TABLE 4 – SIGNIFICANCE DESCRIPTION**

SIGNIFICANCE OF IMPACT	DESCRIPTION
<b>Major (negative)</b>	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. 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.
<b>Moderate (negative)</b>	Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/features that are unique and which, if lost, cannot be replaced or relocated.
<b>Minor (negative)</b>	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.
<b>Low (negative)</b>	Impacts are considered to be local factors that are unlikely to be critical to decision-making.
<b>Low – Major (Beneficial)</b>	Impacts are beneficial to the environment and society.

To ensure the beneficial impacts are brought out in the assessment, green has been applied to ensure the different type of impact is clear. The description for each level of significance presented in Table 4 was also followed when determining the level of significance for a beneficial impact.

The significance of impacts has been derived using professional judgment and applying the identified thresholds for receptor sensitivity and magnitude of change, as well as the definition for significance. In most instances, moderate and major adverse impacts are considered as significant, however there may be some instances where impacts are lower than this but are considered to be significant. The following thresholds were therefore used to double check the assessment of significance had been applied appropriately; a significant impact would meet at least one of the following criteria:

- It exceeds widely recognized levels of acceptable change
- It threatens or enhances the viability or integrity of a receptor or receptor group of concern, and

It is likely to be material to the ultimate decision about whether the Environmental Clearance Certificate is granted.

## **APPENDIX F: ENVIRONMENTAL MANAGEMENT PLAN**



ECC-88-189-REP-06-D

## **ENVIRONMENTAL MANAGEMENT PLAN**

Exploration Activities on EPL 6927  
For Base and Rare Metals, Industrial Minerals and  
Precious Metals  
Otjozondjupa Region

PREPARED FOR



MARCH 2019

## TITLE AND APPROVAL PAGE

<b>Project Name:</b>	Exploration Activities on EPL 6927 For Base and Rare Metals, Industrial Minerals and Precious Metals, Otjozondjupa
<b>Project Number:</b>	ECC-88-189-REP-06-D
<b>Client Name:</b>	Votorantim Metals Namibia (Pty) Ltd
<b>Ministry Reference:</b>	NA
<b>Status of Report:</b>	Public Review
<b>Date of issue:</b>	March 2019
<b>Review Period</b>	26 <sup>th</sup> March – 2 <sup>nd</sup> April 2019

### Environmental Compliance Consultancy Contact Details:

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

#### Stephan Bezuidenhout

Environmental Compliance Consultancy  
Office: +264 81 669 7608  
Email: [stephan@eccenvironmental.com](mailto:stephan@eccenvironmental.com)  
[www.eccenvironmental.com](http://www.eccenvironmental.com)

#### Jessica Mooney

Environmental Compliance Consultancy  
Office: +264 81 669 7608  
Email: [jessica@eccenvironmental.com](mailto:jessica@eccenvironmental.com)  
[www.eccenvironmental.com](http://www.eccenvironmental.com)

### Confidentiality

Environmental Compliance Consultancy Notice: This document is confidential. If you are not the intended recipient, you must not disclose or use the information contained in it. If you have received this document in error, please notify us immediately by return email and delete the document and any attachments. Any personal views or opinions expressed by the writer may not necessarily reflect the views or opinions of Environmental Compliance Consultancy.

Contents

<b>1. Introduction .....</b>	<b>5</b>
1.1. Background to the Proposed Project .....	5
1.1 Environmental Regulatory Requirements .....	6
1.2 Purpose and Scope of this Report .....	6
1.3 Management of this EMP.....	6
1.4 Limitations, Uncertainties and Assumptions of this EMP .....	6
1.5 Environmental Consultancy .....	7
1.6 Structure of this EMP .....	7
<b>2 Project Management Personnel.....</b>	<b>8</b>
2.1 Votorantim Metals Namibia (Pty) Ltd .....	8
2.2 Organisational Structure, Roles and Responsibilities.....	8
2.3 Contractors.....	9
2.4 Employment .....	9
<b>3 Communication and Training .....</b>	<b>10</b>
3.1 Communications .....	10
3.2 Complaints Handling and Recording .....	10
3.3 Training and Awareness .....	10
3.3.1 Site induction .....	10
<b>4 Reporting, Compliance and Enforcement .....</b>	<b>12</b>
4.1 Compliance monitoring.....	12
4.2 Non- compliance .....	12
4.2.1 Non-compliance event .....	12
4.2.2 Disciplinary action .....	12
4.3 Environmental Permits.....	13
<b>5 Environmental and Social Management.....</b>	<b>14</b>
5.1 Environmental Performance measurement.....	14
5.1 Objectives and targets.....	14
5.2 Register of environmental risks and issues .....	14
<b>6 Implementation of the EMP.....</b>	<b>19</b>

**TABLES**

Table 1 - ENVIRONMENTAL SCOPING REPORT SECTIONS..... 7

TABLE 2 – ROLES AND RESPONSIBILITIES ..... 8

TABLE 3 – ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES..... 15

**FIGURES**

Figure 1 - Locality Map..... 5

**DEFINITIONS AND ABBREVIATIONS**

ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence

# 1. INTRODUCTION

## 1.1. BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its Regulations. An environmental clearance application will be submitted to the relevant competent authorities: the Ministry of Mines and Energy (MME) and the Ministry of Environment and Tourism (MET).

Nexa Resources is an investment company of the Votorantim portfolio; the company is listed on the New York Stock Exchange in the United States and the Toronto Stock Exchange in Canada. Votorantim undertakes mineral exploration in Namibia and proposes to undertake low impact exploration activities on EPL 6927 for base and rare metals, industrial minerals and precious metals in the Otjozondjupa Region.

The project is located in the Otjozondjupa region. The licence area is located approximately 25-30 km from Otavi and 12.4 km from Kombat see Figure 1.

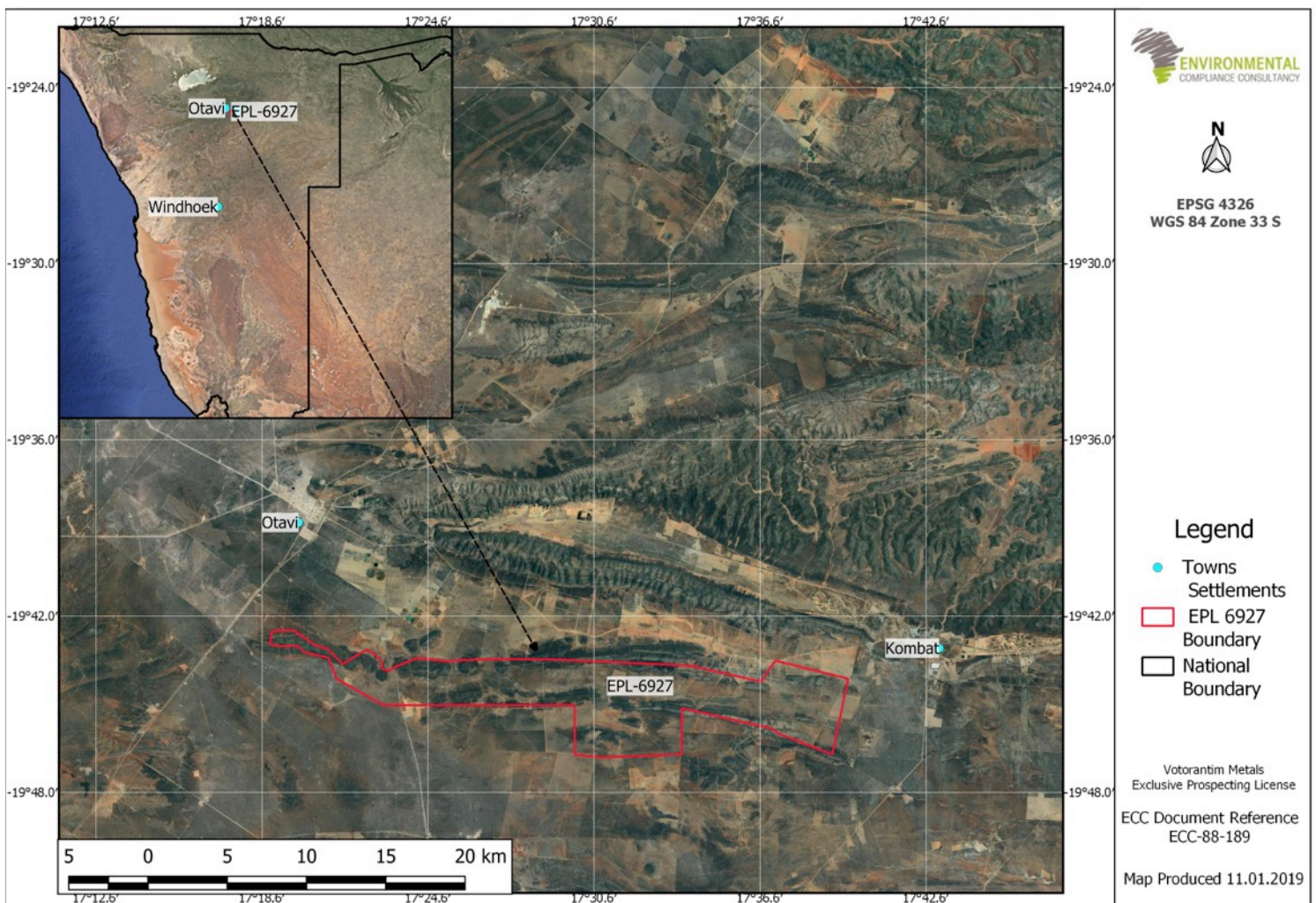


Figure 1 - Locality Map

## 1.1 ENVIRONMENTAL REGULATORY REQUIREMENTS

The proposed project is considered as a Listed Activity as set out in terms of the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulation, 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).

As a listed activity an application for an environmental clearance certificate is required. An environmental scoping report and environmental management plan (EMP) is required as part of the environmental clearance certificate application, as well as to support the decision-making process. This report presents the EMP and has been undertaken in accordance with the requirements of the Environmental Management Act, 2007 and associated Regulations.

## 1.2 PURPOSE AND SCOPE OF THIS REPORT

This EMP provides a logical framework, mitigation measures and management strategies for the exploration activities associated with the proposed project, in this way ensuring that the potential environmental and social impacts are mitigated and minimised as far as practically possible and that statutory and other legal obligations are adhered to and fulfilled. Outlined in the EMP are the protocols, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

This EMP forms an appendix to the environmental scoping report and has been based on the findings of the assessment; therefore, the environmental scoping report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, and/or updated when the scope of works alters, or when further data / information can be added. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

The scope of this EMP includes all activities carried out during the exploration stage in search of base and rare metals, industrial minerals on EPL 6927.

## 1.3 MANAGEMENT OF THIS EMP

The proponent Votorantim Metals Namibia (Pty) Ltd will hold the environmental clearance certificate for the proposed project and shall be responsible for the implementation and management of this EMP. Prior to the exploration activities commencing, this EMP shall be reviewed, amended as required and approved ready for implementation. The implementation and management of this EMP and thus the monitoring of compliance shall be undertaken through daily duties and activities and monthly inspections.

This EMP shall be circulated to all contractors and shall be made available on the Environmental Compliance Consultancy's (ECC) website.

## 1.4 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the safety management plan to be developed by the proponent.

Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines and relevant laws), the contract and statutory requirements are to take precedence.

The information contained in this EMP has been based on the project description as provided in the environmental scoping report. Where the design or exploration methods alter, this EMP may require updating and potential further assessment undertaken.



## 1.5 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy, a Namibian consultancy registration number 2013/11401, has prepared this document on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. The CVs of the authors of this report is contained in Appendix A. ECC is independent of the proponent and has no vested or financial interested in the proposed project expect for fair remuneration of professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or post to the following address:

**Environmental Compliance Consultancy**

PO BOX 91193

Klein Windhoek, Namibia

Tel: +264 81 669 7608

Email: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)

## 1.6 STRUCTURE OF THIS EMP

**Table 1 - ENVIRONMENTAL SCOPING REPORT SECTIONS**

SECTION	TITLE	CONTENT
1	Introduction	This section introduces the EMP and provides background information on the proposed project, proponent and purpose of the report
2	Project Management	Sets the roles of the team responsible for implementing this EMP
3	Communication and Training	Methods for communication the EMP, records and complaints
4	Compliance and Enforcement	Sets out how compliance is monitored, reporting and actions to prevent reoccurrence
5	Environmental and Social Management	Register of commitments for the project
6	Implementation of the EMP	How to implement the EMP

## 2 PROJECT MANAGEMENT PERSONNEL

### 2.1 VOTORANTIM METALS NAMIBIA (PTY) LTD

The proponent shall provide a project team to oversee and undertake the preparation and exploration activities, which shall be composed of the proponent's personnel and contractors. A nominated role shall be identified to ensure the management and implementation of this EMP is throughout the duration of the project, which shall be supported by the proponent.

### 2.2 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

The proponent shall be responsible for:

- Ensuring all members of the project team, including contractors, comply with the procedures set out in this EMP
- Ensuring that all personnel are provided with sufficient training, supervision, and instruction to fulfil this requirement, and
- Ensuring that any persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above. The key personnel and environmental responsibilities of each role through the project life are presented in TABLE 2.

**TABLE 2 – ROLES AND RESPONSIBILITIES**

ROLE	RESPONSIBILITIES & DUTIES
<b>Proponent</b>	<ul style="list-style-type: none"> <li>- Responsible for the management and implementation of the EMP</li> <li>- Ensure environmental policies are communicated to all personnel throughout the proposed project and that employees understand the guidelines of the EMP</li> <li>- Responsible for providing the resources required to complete the project tasks</li> </ul>
<b>Exploration Manager</b>	<ul style="list-style-type: none"> <li>- Overseeing exploration activities</li> <li>- Monitoring daily operations and ensure adherence by personnel to the EMP</li> <li>- Maintain the community issues and concerns register and keep records of complaints</li> <li>- Maintain an up to date register of employees who have completed a site induction</li> <li>- Ensuring that all contract workers, sub-contractors and visitors to the site are aware of the requirements of this EMP, relevant to their roles and adhere to this EMP at all times</li> <li>- Reporting any non-compliance or accidents</li> <li>- Receiving, recording and responding to complaints</li> <li>- Ensure adequate resources are available for the implementation of the EMP</li> <li>- Ensure safe and environmentally sound operations, and</li> <li>- Responsible for the management, maintenance, and revisions of this EMP.</li> </ul>
<b>Employees and Contractors</b>	<ul style="list-style-type: none"> <li>- Adhere to measures set out in the EMP</li> <li>- Ensure they have undertaken a site induction, and</li> <li>- Report any operations or conditions, which deviate, from the EMP as well as any non-compliant issues or accidents to the exploration manager.</li> </ul>

## 2.3 CONTRACTORS

Any contractors hired during the exploration activities or for any accessory works for the project shall be compliant with this EMP, and shall be responsible for the following:

- Undertaking activities in accordance with this EMP as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements
- Implementing appropriate environmental management measures
- Reporting of environmental issues, including actual or potential environmental incidents and hazards, to the Exploration Manager and/or exploration manager, and
- Ensuring appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported by employees and subcontractors.

## 2.4 EMPLOYMENT

The proponent and all contractors shall comply with the requirements of the Republic of Namibia Regulations for Labour, Health and Safety, and any amendments to these regulations. The following shall be complied with:

- In liaison with local government, community, stakeholders and relevant authorities the proponent shall ensure that local people have access to information about job opportunities and are considered first for construction / maintenance contract employment positions
- The number of job opportunities shall be made known together with the associated skills and qualifications
- The maximum length of time the job is likely to last for shall be clearly indicated
- Foreign workers with no proof of permanent legal residence shall not be hired, and
- Every effort shall be made to recruit from the pool of unemployed workers living in the local area.

## 3 COMMUNICATION AND TRAINING

### 3.1 COMMUNICATIONS

During exploration, the exploration manager shall communicate any environmental issues to the project team through the following means (as and when required):

- Site induction
- Audits and site inspections
- Toolbox talks, including instruction on incident response procedures, and
- Key project-specific environmental issues briefings.

This EMP shall be distributed to the exploration team including any contractors and personnel working on the exploration site to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations shall be briefed to workers and contractors.

During the exploration activities, communications between the management team shall include discussing any complaints received and actions to resolve them, any inspections, audits or non-conformance with this EMP, and any objectives or target achievements.

### 3.2 COMPLAINTS HANDLING AND RECORDING

Any complaints received verbally by any personnel on the project site shall be recorded by the receiver, including the name and contact details of the complainant, date and time of the complaint, and the nature of the complaint. The information shall be given to the exploration manager who is overall responsible for the management of complaints and will provide a written response to the complainant. The exploration manager shall inform the site manager of issues, concerns or complaints. It is the duty of the exploration manager to maintain a complaint register that details the name of the complainant, date and time of the complaint, action taken to resolve the issues and date of complaint handover.

The workforce shall be informed about the complaints register, its location and the person responsible, in order to refer local residents or the general public who wish to lodge a complaint. The complainant shall be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register.

The complaints register shall be kept for the duration of the project and will be available for government or public review upon request.

### 3.3 TRAINING AND AWARENESS

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training, and experience.

#### 3.3.1 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with a specific environment and social awareness training component. The environment and social awareness training shall ensure that personnel is familiar with the principles of this EMP, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The exploration manager shall ensure a register of completed training is maintained.

The site induction should include, but not limited to the following:

- A general site-specific induction that outlines:

- What is meant by “environment” and “social”
- Why the environment needs to be protected and conserved
- How exploration activities can impact on the environment
- What can be done to mitigate against such impacts
- The inductee’s role and responsibilities with respect to implementing the EMP
- The sites environmental rules
- Details of how to deal with, and who to contact if environmental problems should they occur
- Basic vegetation clearing principals and species ID sheets
- Noise control measures for drilling in proximity to residents
- The potential consequences of non-compliance with this EMP and relevant statutory requirements, and
- The role of responsible people for the project.

## 4 REPORTING, COMPLIANCE AND ENFORCEMENT

### 4.1 COMPLIANCE MONITORING

#### DAILY

A copy of this EMP shall be on site throughout the project and shall be available upon request. It is the responsibility of the Exploration Manager to ensure this EMP is complied with through their daily roles. Daily inspections will be undertaken by the Exploration Manager (or nominated site supervisor). Any environmental problems or risks identified shall be notified to the exploration manager and actioned as soon as is reasonably practicable.

#### MONTHLY

Monthly inspections shall be undertaken by the Exploration Manager to check that the standards and procedures set out in this EMP are being complied with and pollution control measures are in place and working correctly. Any non-conformance shall be recorded, including the following a brief description of non-conformance, the reason for the non-conformance, the responsible party, the result (consequence), and the corrective action taken and any necessary follow up measures required.

### 4.2 NON-COMPLIANCE

#### 4.2.1 NON-COMPLIANCE EVENT

Where it has been identified that works are not compliant with this EMP, the exploration manager shall employ corrective actions so that the works return to being compliant as soon as possible. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice shall be produced. The notice shall be generated during the inspections and the Exploration Manager shall be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event / situation, for example, is considered if:

- There is evidence of a contravention of this EMP and associated indicators or objectives
- The Exploration Manager and/or contractor have failed to comply with corrective or other instructions issued by the exploration manager or qualified authority, or
- The Exploration Manager and/or contractor fail to respond to complaints from the public.
- Works shall be stopped in the event of a non-compliance until corrective action(s) has been completed

#### 4.2.2 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator/s. Such action may take the form of (but is not limited to):

- Fines / penalties
- Legal action
- Monetary penalties imposed by the proponent on the contractor
- Withdrawal of licence/s, and
- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression / non-compliance, and penalties are to be weighed against the severity of the incident.

### 4.3 ENVIRONMENTAL PERMITS

Whilst the Water Resources Management Act, 2013 is not enforced, it is best practice to adhere to the stipulations while ensuring compliance to the Water Act of 1956 is also maintained. A licence to abstract and use water may be required if boreholes are to be created. If required, the proponent will apply for relevant permits and shall operate in accordance with any conditions in the licence.

Some vegetation shall be cleared on the EPL site to allow exploration activities to commence. It is unlikely that an area greater than 15ha shall be cleared, therefore a permit under the Forest Act, 2001 is not required.

## 5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

### 5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT

This chapter provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as roles responsible. This register will be subject to regular review by the Exploration Manager and updated when necessary.

The Exploration Manager and or Site Manager (if applicable) will use this register to undertake monthly inspections (see next section) to ensure the project is compliant with this EMP.

#### 5.1 OBJECTIVES AND TARGETS

Environmental objectives for the project are as follows:

- Zero pollution incidents
- Minimal vegetation clearing and earthworks
- Protect local flora and fauna, and
- Use natural resources effectively and efficiently.

### 5.2 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental scoping report. From this, a schedule of environmental commitments and risks has been produced (Table 2), which details deliverables including measures identified for the prevention of pollution or damage to the environment during exploration.



**TABLE 3 – ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES**

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT/MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
Use of vehicles and equipment	– Hygiene and Safety	– Amenities (e.g. portable toilets) shall be provided and set up in a suitable location (if required).	– Daily observations	– Exploration Manager
	– Emissions	– All vehicles and machinery/ equipment to be shut down or throttled back between periods of use.	– Daily observations	– Exploration Manager
	– The potential loss of oil and fuel causing ground contamination	– Refueling shall be undertaken in a designated area – All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil – In the event of pollution, polluted soils must be collected and disposed of at an approved site	– Daily observations	– Exploration Manager
	– Water contamination	– Water during drilling should be retained in a lined pond to prevent pollution, and – A ‘good housekeeping’ policy shall be adopted across the construction and maintenance working area	– Daily observations	– Exploration Manager
	– Dust generation	– Use existing access roads and tracks where possible – Apply dust suppression methods such as water spraying during drilling operations – Restricted speeds (<30km/h), and – Specific activities that may generate dust and impact on residents shall be avoided during high wind events.	– Daily observations	– Exploration Manager
	– Noise generation	– Noise shall be minimised as much as possible during the exploration works – No hammering of drill rods with steel hammers in proximity to nearby farm houses – Drill equipment shall be suitably positioned to ensure that noisy equipment is away from human receptors – Noise suppression measures shall be applied if drilling occurs in locations that may affect residents and during evening periods – Residents shall be provided at least two weeks’ notice of drilling operations within 1km of their property, and – Continual engagement with residents shall be undertaken with the proponent.	– Daily observations	– Exploration Manager
General exploration activities	– Loss of access or access affected to the farm and farm	– Access to farms and all farm areas shall always be made available, and – Cattle water holes and feeding areas to remain unaffected.	– Daily observations	– Exploration Manager

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT/MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	<ul style="list-style-type: none"> <li>– areas, and</li> <li>– Farm operations</li> </ul>			
<b>Vegetation clearance</b>	<ul style="list-style-type: none"> <li>– Alien species</li> </ul>	<ul style="list-style-type: none"> <li>– All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (no present on the project site) should have an internal weed and seed inspection completed prior to equipment being used</li> <li>– Ensure the potential introduction and spread of alien plants is prevented, and</li> <li>– Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants.</li> </ul>	<ul style="list-style-type: none"> <li>– If required, monitor the removal of the alien invasive vegetation, and</li> <li>– Check the tyre of vehicles after use on site.</li> </ul>	<ul style="list-style-type: none"> <li>– Employees</li> <li>– Exploration Manager</li> </ul>
	<ul style="list-style-type: none"> <li>– Dust generation</li> </ul>	<ul style="list-style-type: none"> <li>– Apply speed restrictions, and</li> <li>– Avoid off road driving.</li> </ul>	<ul style="list-style-type: none"> <li>– Daily observations</li> </ul>	<ul style="list-style-type: none"> <li>– Exploration Manager</li> </ul>
	<ul style="list-style-type: none"> <li>– Reduced soil quality</li> </ul>	<ul style="list-style-type: none"> <li>– Use existing tracks where possible</li> <li>– Refueling to occur in designated areas with drip trays, and</li> <li>– Avoid natural drainage lines for exploration activities.</li> </ul>	<ul style="list-style-type: none"> <li>– Daily observations</li> </ul>	<ul style="list-style-type: none"> <li>– Exploration Manager</li> </ul>
	<ul style="list-style-type: none"> <li>– Injure or kill animals</li> </ul>	<ul style="list-style-type: none"> <li>– No driving off designated access routes (into the bush) / off-road driving</li> <li>– No snares or catching of animals, no keeping or housing of pets for food, and</li> <li>– No animals or birds may be collected, caught, consumed or removed from site by the Contractor or personnel on site.</li> </ul>	<ul style="list-style-type: none"> <li>– Daily observations</li> </ul>	<ul style="list-style-type: none"> <li>– Exploration Manager</li> </ul>
	<ul style="list-style-type: none"> <li>– Removal of vegetation – loss of flora and fauna, protected/important species</li> </ul>	<ul style="list-style-type: none"> <li>– Use existing tracks where possible</li> <li>– Route new tracks around established and protected trees, and clumps of vegetation</li> <li>– Identify rare, endangered, threatened and protected species. Demarcate and avoid cutting down, and clearly highlight to construction workers so that they are avoided, and</li> <li>– Avoid natural drainage lines.</li> </ul>	<ul style="list-style-type: none"> <li>– Daily visual inspection during construction of new access tracks/widening</li> </ul>	<ul style="list-style-type: none"> <li>– Employees</li> <li>– Exploration Manager.</li> </ul>

ACTIVITY	– POTENTIAL IMPACTS	MANAGEMENT/MITIGATION MEASURES	– MONITORING REQUIREMENTS	– RESPONSIBILITY
<b>Site and ground preparation – creation of access tracks and areas for setting up drill rigs</b>	<ul style="list-style-type: none"> <li>– Heritage remains</li> </ul>	<p>Discovery of unearthed archaeological remains to be uncovered, the following measures (chance find procedure) shall be applied:</p> <ul style="list-style-type: none"> <li>– Works to cease, area to be demarcated with appropriate tape by the site supervisor, and the Exploration Manager to be informed</li> <li>– Exploration Manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform the Environmental Consultant with the GPS position if possible</li> <li>– If works cannot proceed without damage to findings, Exploration Manager to inform the Environmental Consultant for the archaeologist inspection and advice</li> <li>– Environment Compliance Consultancy’s Archaeologist will evaluate the significance of the remains and identify appropriate action, for example, record and remove; relocate or leave in situ (depending on the nature and value of the remains)</li> <li>– Inform the police if the remains are human, and</li> <li>– Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.</li> </ul>	<ul style="list-style-type: none"> <li>– Daily observations</li> </ul>	<ul style="list-style-type: none"> <li>– Exploration Manager</li> </ul>
<b>Fuel handling and storage</b>	<ul style="list-style-type: none"> <li>– Loss of containment leading to ground or groundwater contamination</li> </ul>	<p><b>Safe Delivery and handling:</b></p> <ul style="list-style-type: none"> <li>– Training employees and Toolbox Talks</li> <li>– Good housekeeping across site</li> <li>– Fuel is handled with care</li> <li>– Spill kits to be available for use during refueling, fuel delivery or use.</li> <li>– Absorption material should be available. Where saw dust is used it should be cleaned up immediately and not left for long periods</li> <li>– Any spill is to be reported to the Exploration Manager once containment has been achieved.</li> <li>– Plant and equipment to be well maintained and serviced regularly, and</li> <li>– In the field, use of hydrocarbons under 200 liters can be used for mobile refueling or servicing.</li> <li>– Fuel spills of greater than 200lts are to be reported to the MME in terms of the Petroleum Products and Energy Act, 1990</li> </ul> <p><b>Storage:</b></p> <ul style="list-style-type: none"> <li>– All tanks to be stored on a non-porous floor and bunded area</li> </ul>	<ul style="list-style-type: none"> <li>– Daily observations when fuels are delivered and handled</li> <li>– Supervision during refueling, and</li> <li>– Weekly observations monitor containment and storage.</li> </ul>	<ul style="list-style-type: none"> <li>– Exploration manager</li> </ul>

		<ul style="list-style-type: none"> <li>- Bund to be capable of storing at least 110% of the volume of the tank</li> <li>- All containers to be suitable for use and not damaged</li> <li>- Tanks are locked at all times, and</li> <li>- Spill kits available at in suitable locations.</li> </ul> <p><b>Refueling</b></p> <ul style="list-style-type: none"> <li>- Drip trays to be used during refueling of vehicles and on a permeable flat surface where possible, and</li> <li>- Funnels should be available and used to avoid spillage during decanting.</li> </ul>		
<b>Generation of waste</b>	<ul style="list-style-type: none"> <li>- Nuisances (odors and visual)</li> <li>- Land use, and</li> <li>- Litter (nuisance and ecological risk).</li> </ul>	<ul style="list-style-type: none"> <li>- Training and Toolbox Talks</li> <li>- Good housekeeping across site</li> <li>- All working areas shall apply good house-keeping</li> <li>- Implement the waste management hierarchy across site: Avoid, reuse, recycle, then disposal through burning or landfill</li> <li>- Waste shall be collected and shall be removed on a regular basis to avoid pests and bad odours, and</li> <li>- It is unlikely that hazardous material and wastes will be produced, however in the event that they do, they shall be managed in a safe and responsible manner so as to prevent contamination of soils, pollution of water and/or harm to people or animals as a result of the use of these materials. Hazardous and non-hazardous waste shall be stored separately at all times.</li> </ul>	<ul style="list-style-type: none"> <li>- Daily observations, and</li> <li>- Weekly checks</li> </ul>	<ul style="list-style-type: none"> <li>- Exploration Manager</li> <li>- Employees</li> </ul>
<b>Resource use</b>	<ul style="list-style-type: none"> <li>- Inefficient use of water</li> </ul>	<ul style="list-style-type: none"> <li>- Use water effectively and efficiently</li> </ul>	<ul style="list-style-type: none"> <li>- Daily observations</li> </ul>	<ul style="list-style-type: none"> <li>- Exploration Manager</li> <li>- Employees</li> </ul>
<b>Job creation</b>	<ul style="list-style-type: none"> <li>- Employment creation and skills development opportunities during the exploration phase.</li> </ul>	<ul style="list-style-type: none"> <li>- Maximise local employment and local business opportunities</li> <li>- Enhance the use of local labour and local skills as far as reasonably possible</li> <li>- Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.</li> </ul>	<ul style="list-style-type: none"> <li>- Daily observations, and</li> <li>- Weekly checks.</li> </ul>	<ul style="list-style-type: none"> <li>- Exploration Manager</li> <li>- Employees</li> </ul>

## 6 IMPLEMENTATION OF THE EMP

Exploration work will be carried out in compliance with the relevant requirements of the Minerals (Prospecting and Mining) Act, 1992. No significant impacts are anticipated for the activities that have been identified and management and mitigation measures are in place for potential risks.

This EMP:

- A. Has been prepared pursuant to a contract with the proponent
- B. Has been prepared on the basis of information provided to ECC up to January 2019
- C. Is for the sole use of the proponent, for the sole purpose of an EMP
- D. Must not be used (1) by any person other than the proponent or (2) for a purpose other than an EMP, and
- E. Must not be copied without the prior written permission of ECC.

ECC has prepared the EMP on the basis of information provided by the proponent, specialist reports and the environmental scoping report.