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**PROJECT STATUS**

<b>Title</b>	UPDATED ENVIRONMENTAL MANAGEMENT PLAN FOR THE RENEWAL OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE MINING ACTIVITIES OF BASE AND RARE METALS (Copper Ore) ON MINING CLAIMS; 69776 – 69781, SITUATED AT OTWANI, OPUWO RURAL CONSTITUENCY, KUNENE REGION, NAMIBIA.		
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## Contents

ABBREVIATIONS .....	iv
1. INTRODUCTION.....	1
1.1 Benefits and target population .....	2
1.2 The main environmental issues related to mining at the 6 mining claims (69776-69781) are: ...	2
1.3 Environmental Management and Monitoring Plan .....	4
1.4 Environmental & Social Monitoring Plan.....	9
1.5 Emergency Response Plan .....	10
1.5.1 Risk Assessment Methodology .....	11
2 ROLES AND RESPONSIBILITIES .....	13
2.1 PROPONENT’S REPRESENTATIVE .....	13
2.2 ENVIRONMENTAL CONTROL OFFICER .....	14
2.3 CONTRACTOR.....	14
2.4 Covid19 INFECTION PREVENTION AND CONTROL MEASURES .....	15
2.4.1 Education of workers should be given on:.....	16
2.4.2 Screening and testing at the designated areas.....	19
<b>2.5 Continuous Measures</b> .....	20
3.0 MANAGEMENT ACTIONS .....	21
3.1 ASSUMPTIONS AND LIMITATIONS .....	21
3.2 APPLICABLE LEGISLATION .....	22
3.2.1 Regulatory Framework for Environmental Management in the Mining Sector .....	22
3.3 PROJECT LOCATION.....	28
3.4 COPPER ORE MINING PHASE .....	29
3.5 MINE REHABILITATION PHASE (Continuous) .....	39
3.6 DECOMMISSIONING PHASE .....	41
4.0 CONCLUSION AND RECOMMENDATIONS.....	45
ANNEXURE A: WATER QUALITY GUIDELINES.....	46
ANNEXURE B: COVID-19 RISK ASSESSMENT FORM (AS AMENDED PERIODICALLY BASED ON DEVELOPING MEDICAL INFORMATION) .....	54
ANNEXURE C: PREVIOUSLY ISSUED ENVIRONMENTAL CLEARANCE CERTIFICATE .....	58

**LIST OF FIGURES**

Figure 1: Typical COVID-19 information poster to be placed at designated areas at the mining sites. ....	18
Figure 2: Location of the 6 mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia (MME Portal, 2020). .....	28

**LIST OF TABLES**

Table 1: Environmental Management Plan .....	5
Table 2: Environmental Monitoring plan .....	10
Table 3: Severity Criteria .....	11
Table 4: Frequency/ Probability Criteria .....	11
Table 5: Exposure Criteria .....	12
Table 6: Emergency Response Plan .....	12
Table 7: Responsibilities of PR .....	13
Table 8: List of triggered activities identified in the EIA Regulations which apply to the project .....	23
Table 9: Legislation applicable for the mining of copper ore on mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia .....	24
Table 10: Copper ore Mining Phase Management Actions .....	29
Table 11: Mine Rehabilitation Phase Management actions .....	39
Table 12: Decommissioning plan .....	41

## ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
Covid19	Coronavirus disease 2019 ( <b>COVID-19</b> ) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GIS	Geographic Information System
GN	Government Notice
GPS	Global Positioning System
HIV	Human Immuno-deficiency Virus
HEEC	Healthy Earth Environmental Consultants CC
I&APs	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water & Land Reform
MEFT:DEA	Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs
MHSS	Ministry of Health & Social Services
NHCN	National Heritage Council of Namibia
PR	Proponent's Representative
Reg.	Regulation
S	Section
TB	Tuberculosis

## 1. INTRODUCTION

Mining contributes to 25% of the country's income. It is the largest contributor to the Namibian economy. Namibia has various natural resources including diamonds, uranium, copper, gold, lead, tin, lithium, cadmium, zinc, salt and vanadium. Copper is by far the most abundant mineral commodity in Namibia. This is reflected not only by the fact that several copper mines are productive in the country at present: archaeological evidence in the form of ancient smelting sites proves the Namibian copper deposits have been exploited for many centuries. Radiocarbon dates suggest that copper was smelted in the Khomas Hochland as early as 1420, while pre-modern mining and metallurgical activities peaked during the seventeenth century (Kinahan and Vogel, 1982).

The proponent, Luxury Investments One Hundred And Ninety Two Pty intends to continue mining base and rare metals targeting copper ore from the mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia. The Ministry of Trade and Industry regulates manufacturing, including mineral beneficiation, cement production, and semiprecious stone processing. Nationwide exploration at the moment focuses on base metals, diamond, gold, natural gas and uranium. This shows that the mining sector has great potential to grow and continue to development in the country.

The Government of Namibia recognises that the exploration and development of its mineral wealth could best be undertaken by the private sector. Government therefore focuses on creating an enabling environment through appropriate competitive policy and regulatory frameworks for the promotion of private sector investment coupled with the provision of national geo-scientific data bases essential for attracting competitive exploration and mining (Minerals Policy of Namibia, MME, 2013).

It is with this background that Luxury Investments One Hundred And Ninety Two Pty has decided to continue mining base and rare metals targeting copper ore for commercial purposes and derive the monetary benefits associated with the extraction of these natural resources as he is a holder of the application for the mining claims from the Ministry of Mines and Energy after following all the necessary procedures to satisfy the relevant Authorities enabling them to mine the copper ore from the allocated portions on the seven mining claims.

The EMP will be a living document, developed in consultation with the proponent, to be reviewed and updated biannually. More broadly, it will provide a blueprint for handling environmental issues related to copper mining at the mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency,

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Kunene Region of Namibia over the next 25 years, within the broader context of environmental and social sustainability.

### **1.1 Benefits and target population**

Managing and mitigating environmental problems in the mining sector would yield economic benefits from improved human health and ecosystem functions in the Otwani Village area where the mining claims are situated. Health benefits will accrue from reduced exposure to environmental pollution and to the risk of accidents. The Project would also indirectly help improve worker health and safety conditions in existing and future mining enterprises, by strengthening the regulatory framework.

The ongoing project has indirectly benefited the people of Namibia by removing impediments to new private investments and job creation as it employs over 30 people on a permanent basis on the active mining claim. The mining operations have improved the capacity of mandated national agencies to regulate mining activities through environmental monitoring and auditing. It thus has strengthened the management and planning capacities of Luxury Investments One Hundred And Ninety Two Pty, and of delegated authorizing agencies such as MEFT, and improved the skills of staff from these agencies to do strategic planning, monitoring, and to evaluate environmental issues and proposed mitigation measures. The Project has also helped strengthen national capacity in environmental management through consultancies, studies and targeted training.

### **1.2 The main environmental issues related to mining at the 6 mining claims (69776-69781) are:**

#### **a) Air Pollution**

The major environmental issue on the mining claims is air pollution. Dust can severely affect the health of neighboring populations (especially respiratory problems) in Otwani village and adjacent farms.

#### **b) Soil Contamination**

Leaking hydrocarbons such as oil/diesel/ petrol during mining operations can contaminate soil.

### **c) Water pollution**

Several ephemeral rivers are found within the Otwani Village and the mining claim areas. This makes the area susceptible to flooding in some areas during the rainy season. Runoff and leakage from existing waste rock dumps may pollute streams flowing out of the mine areas, causing widespread negative impacts downstream from the mines that extend as far as the Kunene River and affect wetlands and tributaries. The pollution has an impact on human health and ecological functions that is not fully determined. Lower water quality leads to increased water treatment costs. The pollution from the waste rock dumps needs to be contained and the sites rehabilitated. There are currently no visible surface water bodies to be considered with regard to the active mining claim sites, as there are no perennial water sources in the area. However, surface water impacts may be encountered during the operation phase, especially if excavation takes place within the rainy season.

The risk of contaminating such water sources can be increased by accidental spillage of oils and fuels and any other equipment used during operation. This risk is minimised by the fact that the extraction phase will be within the long dry season.

The main foreseen environmental problems at the mining claims (69776, 69777, 69778, 69779, 69780 & 69781) are deforestation, soil contamination, pollution, land dereliction, poor modern sanitation, unplanned makeshift homes around the mines and noxious weeds arising from eutrophication of any nearby water bodies by sewage effluent. The impact of pollution from mining activities is compounded by the fact that nearly ninety per cent of the populations in Otwani Village are nomadic pastoralists. This has resulted in concentrated demand for natural resources, such as grazing land, water, energy and food. Competing demands for water by livestock and households is already constraining the sustainable use of water resources. Luxury Investments One Hundred And Ninety Two Pty have identified this issue and have alleviated the water scarcity in the Otwani village by drilling a borehole which pumps water to the community and to animal water holes. Their mining operations are not fed by water from this borehole but rather from the existing water that was harvested in the quarry pit during the past rainy season. Over dependence on firewood for fuel and wood to build temporary structures by households has been the main cause of deforestation at the Otwani Village.

An updated EMP is one of the most important outputs of the EA process as it synthesises all of the proposed mitigation and monitoring actions, set to a timeline and with specific assigned responsibilities. This updated EMP details the environmental compliance audit on the mitigation and monitoring actions that are being implemented during the following phases of these copper mining activities:

- Copper ore mining Phase – the period during which the proponent, having dealt with the necessary legislative and administrative arrangements, appoints a contractor to engage in the mining of base & rare metals targeting copper ore from the mining claim site to be transported to the various smelters for commercial value addition & Walvis Bay port for export purposes;
- Transportation Phase- the period during which the proponent transports the copper ore from the mine to the various smelters for commercial value addition & Walvis Bay port for export.
- Operation and Maintenance – the period during which the services infrastructure will be fully functional and maintained.

The decommissioning of these mining operations is not envisaged any time soon because there is a viable resource with a feasibility to continue for up to two decades; however in the event that this should be considered some recommendations have been outlined in **Table 12**.

### **1.3 Environmental Management and Monitoring Plan**

This updated EMP presents a summary of the various impacts as identified from the site visit (July 2020) at mining claims 69776, 69777, 69778, 69779, 69780 & 69781 at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia and the mitigation measures that must be put in place at the copper ore mining claims in order to reduce the negative impacts of the project on the environment. The proponent, Luxury Investments One Hundred And Ninety Two Pty is encouraged to implement the recommendations raised herein. It must be noted that environmental management is an on-going process and must be continuously reviewed in order to review and correct other impacts that may arise and may not have been obvious at each stage of the project.

The 6 mining claims owned by Luxury Investments One Hundred And Ninety Two Pty are currently at the initial stages of the project cycle, with exploration having being completed and operations limited to one active mining claim site that is 69777. **Table 1** outlines the Environmental Management Plan that must be implemented at all the 6 mining claims as the copper ore is extracted and by Luxury Investments One Hundred And Ninety Two Pty in order to promote environmental sustainability.



**Table 1: Environmental Management Plan**

<b>Construction of crusher site and mining phase</b>				
<b>Potential Impact</b>	<b>Possible Cause</b>	<b>Mitigation</b>	<b>Monitoring Agent</b>	<b>Time Frame</b>
<b>Physical</b>				
Dust generation	-Grading & gravelling existing access roads -Site clearing for building workers compound, crusher site, workshop and offices	-Avoid maintaining roads under strong winds. -Selective clearing of vegetation. -Minimise burning of cleared vegetation. -Planting of trees around the mine to act as a wind breaker.	Roads Authority, MAWLR., MEFT:DEA	Daily, Weekly, Quarterly
Disturbance and Contamination of ground water	-Drilling of boreholes	-Engage experts in borehole drilling -Boreholes to be approved by MAWLR- Hydrology Department -Water to be put in settling ponds before discharge to the environment -Recycle as much water as possible	MAWLR	Once off
<b>Biological</b>				
Deforestation and Habitat loss	-Site construction -Noise from heavy equipment -Dust from mining operations and site clearing	-Selective cutting down of trees -Re-vegetate cleared areas, where necessary -Machines to be fitted with sound silencers -Regular watering of the mine site to minimise dust	ECO;MAWLR, MEFT:DEA	Weekly, Quarterly
Injury or death of livestock	-Livestock falling in unprotected trenches -Livestock being run over by heavy vehicles	-Fence off the mine workings -No unauthorised entry should be allowed -Put danger warning signs -Barricade the whole project site with a perimeter fence	ECO; MAWLR, MEFT:DEA; MME	Once off
Fire hazard	-No fire guards in place -Haphazard workings -No explosive box in site	-Establish and maintain fire guards -Establish structures according to the Siting of Works plan approved by the Ministry of Mines & Energy -Engage the Regional Mining Engineer in the licensing of a proper magazine box	ECO;MEFT:DEA ; MME	Biannually

Operational phase				
Physical				
Air and Noise Pollution	<ul style="list-style-type: none"> <li>-Dust generated from blasting</li> <li>-Dust generated from ore movement activities like loading and transportation</li> <li>-Exhaust fumes from vehicles and other equipment</li> <li>-Noise from drilling and blasting</li> <li>-Noise from heavy vehicles and equipment engines</li> </ul>	<ul style="list-style-type: none"> <li>-Undertake controlled blasting;</li> <li>-Set enough lead times between blasting and mining</li> <li>-Blasting to be done during the day;</li> <li>-Establish blasting times and erect signs to that effect.</li> <li>-The local community should be notified using the prescribed channels via the Otwani Village Traditional Authority and be aware of the blasting schedule and take all the necessary precautions to avoid the blast sites and also plan their daily activities with the full understanding of the blasting activities and mining operations.</li> <li>-Workers to be equipped with ear muffs and inhalers;</li> <li>-Proper vehicle maintenance to reduce exhaust fumes and vehicles should be switched key off when not in operation to reduce noise pollution.</li> <li>-A 10km/hr speed limit should be observed within the vicinity of the copper mine.</li> <li>-Put speed warning signs around the mining area</li> <li>-Vehicles to be fitted with silencers</li> <li>-Regular watering of the mining area to suppress dust</li> </ul>	ECO;MEFT:DEA ; MME	Daily, weekly, quarterly.
Land degradation & loss of aesthetic value	<ul style="list-style-type: none"> <li>-Oil and diesel spillages from vehicles and equipment</li> <li>-Land clearing for increased mining operations</li> </ul>	<ul style="list-style-type: none"> <li>-Regular servicing of vehicles</li> <li>-Selective land clearing i.e. clearing where necessary</li> <li>-Mining activities to adhere to Minerals (Prospecting &amp; Mining Act, 1992 (Act No. 33 of 1992)</li> <li>-Avoid vehicle overloading</li> </ul>	ECO;MEFT:DEA ; Ministry of Mines & Energy(MME)	Daily, Weekly

Soil Erosion& Contamination of Surface Water	-Surface run off from mine waste water -Contamination due to oil and diesel spills -Dust from ore hauling and loading activities	-Recycling of water -Terrace the steep slopes to minimise surface run off -Oil and diesel spillages should be effectively contained by constantly checking the vehicles and machinery and those with leaks should be fitted with drip trays. -Implement procedures to minimise drop height between the tipper and front end loader.	ECO; MAWLR, MEFT:DEA; Ministry of Mines & Energy(MME)	Daily, Weekly
<b>Biological/ Ecological</b>				
Deforestation and loss of biodiversity	-Vegetation clearing for mining expansion -Dust settling on foliage	-Any expansion to be approved by the Mining Commissioner and the Regional Mining Engineer -Avoid indiscriminate cutting down of trees -Minimise dust emission -Establish vegetation perimeter around the mining area to trap dust	ECO; MAWLR, MEFT:DEA; Ministry of Mines & Energy(MME)	Daily, weekly, quarterly
Siltation of nearby ephemeral streams and Disturbance of Aquatic Life	-Dust generated settling in the river (ephemeral) -Surface run off from mine site	-Minimise dust by watering the mine area -Encourage water recycling -Water sampling to test impurities	ECO; MAWLR, MEFT:DEA; Ministry of Mines & Energy(MME)	Daily, Weekly
Impact to ecosystem food chains	-Birds migration due to noise and dust from blasting and heavy equipment -Land clearing -Dissolved nutrients in water drawn from the mine	-Selective vegetation clearing -Mine water should be recycled -Establish water sampling points -Regular monitoring of water quality in nearby rivers	ECO; MAWLR, MEFT:DEA; Ministry of Mines & Energy(MME)	Quarterly
<b>Socio-Economic</b>				
Occupational health and safety hazards	-Poor sanitary conditions -Poor mechanisation of workings	-Construct proper/functional toilets for workers -Provision of clean and safe water from a borehole	ECO; Ministry of Health & Social Services	Quarterly

	<ul style="list-style-type: none"> <li>-Lack of proper PPE</li> <li>-Dust related illnesses</li> <li>-High risk of STIs, HIV, Covid19 and AIDS</li> </ul>	<ul style="list-style-type: none"> <li>-Adequate lighting and ventilation should be provided in the workings</li> <li>-Adequate PPE to be provided to all employees</li> <li>-No machine drilling shall be done dry as per Minerals (Prospecting &amp; Mining) Act, 1992 (Act No. 33 of 1992).</li> <li>-Abide to the stipulated Covid19 regulations to prevent infections and to isolate and quarantine suspected cases at the designated centres. Keep a register of all visitors to the mine to enable contact tracing if the need arises.</li> <li>-Institute HIV&amp; AIDS awareness programs at the mine</li> <li>-Condoms should be easily accessible at the mine</li> <li>-Provision of a fully equipped First Aid kit with no expired medication.</li> </ul>	<p>(MHSS); Social Security Commission (SSC); Ministry of Mines &amp; Energy(MME)</p>	-Daily
Injury to people and animals	<ul style="list-style-type: none"> <li>-Falling into unprotected mine workings</li> <li>-Dangers of flying rocks from blasting</li> <li>-Accidents due to poor OSH procedures</li> </ul>	<ul style="list-style-type: none"> <li>-Establish a perimeter fence around the mine premises</li> <li>-No unauthorised entry into the mine</li> <li>-Barricade the mine workings</li> <li>-Establish blasting times and erect danger warning signs</li> <li>-Blasting to be carried out during the day.</li> <li>-Only primary blasting to be done.</li> <li>-Local community to be notified and aware of the blasting schedule and associated activities.</li> <li>-Implement proper OSH procedures in line with Minerals (Prospecting &amp; Mining Act, 1992 (Act No. 33 of 1992).</li> </ul>	<p>ECO; Ministry of Health &amp; Social Services (MHSS); Ministry of Mines &amp; Energy(MME); Social Security Commission (SSC)</p>	Once off

#### 1.4 Environmental & Social Monitoring Plan

An Environmental monitoring plan has been put in place to check on the effectiveness of the Environmental Management Plan in dealing with the impacts identified in this assessment. Some of the environmental parameters that need to be monitored at the copper ore mining claims (69776, 69777, 69778, 69779, 69780 & 69781) are:

- a) Dissolved Metals and Metals in Sediments:- cadmium, arsenic, chromium, copper, iron, lead, mercury, nickel, silver and zinc
- b) Conductivity
- c) Total Suspended Solids
- d) pH
- e) Safety of workings
- f) Employee Health- **Covid19**, TB, asthma, lung cancer, hearing ability, sight, backbone
- g) **Workers' insurance** - Social Security Commission (SSC) contributions

Samples of water shall be drawn from sunk boreholes as mining operations continue, to determine the composition of water with respect to dissolved heavy metals like cadmium, lead, copper, nickel, zinc, chromium, mercury, and arsenic. Quarterly samples must be drawn so as to determine how the results vary from the baseline studies. The same will be done for conductivity, total suspended solids and pH. Water drawn from boreholes at the mine shall be subjected to quarterly samples so as to determine the degree of leachates as well the pH and conductivity of water.

Quarterly medical checks should be done on employees who work in dusty areas and those that work with heavy machines and their records should be kept at the mine. Aspects to be checked are Covid19 antibody presents, tuberculosis, asthma, lung cancer, hearing ability and backache, among other issues. This will determine the effectiveness of the mine's Occupational Safety and Health (OSH) programmes.

Experience has shown that most mines do not remit moneys they deduct from employees to SSC as per Social Security Act, 1994 (Act No. 34 of 1994), currently read with the Employees' Compensation Act, 1941 (Act No. 30 of 1941) as amended. Due to that, it is now necessary to monitor such mines and make sure that workers are insured against death or injury at work. Contributions must be remitted as and when they are required. Table 2 details the monitoring program that must be followed at the mine.

**Table 2: Environmental Monitoring plan**

<b>Environmental Aspect</b>	<b>Method of Monitoring</b>	<b>Regulation Body/Org</b>	<b>Frequency</b>
-Dissolved Metals/ Metals in Sediments (cadmium, arsenic, chromium, copper, iron, lead, mercury, silver and zinc) -Conductivity -pH -Total Suspended Solids	-Water sampling at a point in the nearby stream -Borehole water samples	-MAWLR -MEFT:DEA	Quarterly
Safety of Workings -gases, fumes, blasting equipment	-Monitoring before and after blasting	-ECO -Regional Mining Engineer -SSC	Twice daily
Employee Health -Covid19, TB, asthma, lung cancer, hearing ability, backbone	-Medical checks - <b>Daily temperature checks for Covid19</b> , anyone with a temperature reading of more than 37.9° C must be isolated and taken for a Covid19 test.	-ECO -MHSS, -SSC	Quarterly
Workers' insurance	Checking with NSSA	-SSC -Namibia Miners Federation	Monthly

### 1.5 Emergency Response Plan

The Emergency Response Plan is a set of measures that will be implemented, in response to emergency situations that could potentially occur during mining and mining-related activities. The Emergency Response plan addresses emergency response elements including identification of potential emergency scenarios, emergency response organisations and responsibilities, co-ordination with governmental emergency response organisations, emergency alarms and communication, emergency response procedures (including evacuation procedures), emergency response equipment, training and drills for the operation of all the proponent's project facilities at all the mining claims (69776, 69777, 69778, 69779, 69780 & 69781). Please find the Emergency Numbers below:

#### **OPUWO**

<b>Ambulance</b>	<b>+264 (65) 27-0326</b>
<b>Electricity</b>	<b>+264 (65) 27-3076</b>
<b>Clinic</b>	<b>+264 (65) 27-3026</b>

Police

+264 (65) 27-3041

Water & Sewage

+264 (65) 27-3007

### 1.5.1 Risk Assessment Methodology

For the purposes of this mining project, we will make use of the NOSA HIRA (Hazard Identification and Risk Assessment) methodology. The methodology comprises three parameters, namely:

#### (a) Severity

This is an evaluation of the worst conceivable SHE consequence of a hazard. An exponential weighting is used in order to reflect a bias towards the consideration of the severity of the consequences as opposed to frequency or exposure when evaluating a hazard. The criteria for rating severity are shown in Table 3.

**Table 3: Severity Criteria**

Weight Number	Hazard Description	Environment	Safety/ Health
16	CATASTROPHIC	Irreversible ecological damage	Multiple fatalities due to injury or occupational diseases
8	MAJOR	Reversible ecological damage with potential long term impact	Fatality or number of disabilities/ disabling diseases
4	MODERATE	Ecological disturbance, can be rehabilitated	Disabling injuries or occupational illness
2	MINOR	Short-term ecological impacts. Requires intervention	Minor injuries or exposure requiring medical attention
1	INSIGNIFICANT	Low impact, natural rehabilitation	First Aid treatment required

#### (b) Frequency /Probability

Frequency/ Probability are a linear evaluation of how often a hazard has resulted in a consequence (incident history). In the absence of incident history how often a hazard may result in a known consequence (established through industry standards and research and assumption if needed) may be used. The Frequency/ Probability criteria are shown in the Table 4.

**Table 4: Frequency/ Probability Criteria**

Weight Number	1	2	3	4	5
Evaluation Description	Rare	Infrequent	Frequent	Often	Consistent
Frequency	Less than once every 5 years	Every 1- 5 years	Multiple times per year	Monthly	Daily/weekly

**(c) Exposure**

Exposure is the percentage of a workforce exposed to a particular hazard and or the duration of the exposure. Its rating is shown in Table 5.

**Table 5: Exposure Criteria**

Weight Number	1	2	3	4	5
<b>Evaluation Description</b>	Minimal	Restricted	Local	Widespread	Extensive
<b>Safety/ Health Exposure</b>	A few of the workforce, minimal time	A few of the workforce, some of the time / some of the workforce minimal time	Some of the workforce, some of the time	Most of the workforce, some of the time or / some of the workforce, most of the time	Most of the workforce, most of the time
<b>Environmental Exposure</b>	Incident site	Localised	Plant wide	Immediate neighbours	Community exposure

NB: Risk is calculated as follows: **Risk= Severity × Frequency × Exposure**

**Table 6: Emergency Response Plan**

Risk	Contingency Plan
Fire hazard	<ul style="list-style-type: none"> <li>-Fire extinguishers to be put in place</li> <li>-Workers training on use of extinguishers</li> <li>-Fire Brigade contact numbers to be clearly displayed</li> <li>-Emergency numbers to be given to every worker (See Section 1.5 above)</li> <li>-Establish an Assembly point</li> <li>-Fire drills</li> <li>-Fireguards</li> </ul>
Power generator failure	<ul style="list-style-type: none"> <li>-Standby generator to be put in place</li> <li>-Standby fuel storage facility to be kept separately</li> </ul>
Outbreak of infectious disease	<ul style="list-style-type: none"> <li>-Isolate the infected person(s)</li> <li>-Take the person to hospital</li> <li>-Mine vehicle to be on site every time</li> <li>-Calling the ambulance</li> <li>-Emergency numbers to be given to every worker</li> </ul>



## 2 ROLES AND RESPONSIBILITIES

Luxury Investments One Hundred And Ninety Two Pty, who is the proponent, is ultimately responsible for the implementation of the EMP, from the planning and design phase to the decommissioning phase (when these mining operations are no longer financially viable). The proponent will delegate this responsibility as the project progresses through its life cycle. The delegated responsibility for the effective implementation of this EMP will rest on the following key individuals:

- Proponent's Representative;
- Environmental Control Officer; and
- Contractor (Luxury Investments One Hundred And Ninety Two Pty).

### 2.1 PROPONENT'S REPRESENTATIVE

The proponent should assign the responsibility of managing all aspects of these mining activities for all lifecycle phases (including all contracts for work outsourced) to a designated member of staff, referred to in this EMP as the Proponent's Representative (PR). The proponent may decide to assign this role to one person for the full duration of these mining activities, or may assign a different PR to each of the lifecycle phases – i.e. one for the copper ore mining phase, one for the transportation phase and one for the mine rehabilitation phase. The PR's responsibilities are as follows:

**Table 7: Responsibilities of PR**

Responsibility	Project Phase
Making sure that the necessary approvals and permissions laid out in <b>Table 9</b> are obtained/adhered to	Throughout the lifecycle of this project.
Suspending/evicting individuals and/or equipment not complying with the EMP	<ul style="list-style-type: none"> <li>• <b>Copper ore mining</b></li> <li>• <b>Transportation of copper ore</b></li> <li>• <b>Mine rehabilitation</b></li> </ul>
Issuing fines for contravening EMP provisions	<ul style="list-style-type: none"> <li>• <b>Copper ore mining</b></li> <li>• <b>Transportation of copper ore</b></li> <li>• <b>Mine rehabilitation</b></li> </ul>

## 2.2 ENVIRONMENTAL CONTROL OFFICER

The PR should assign the responsibility of overseeing the implementation of the whole EMP on the ground during the copper ore mining & mine rehabilitation phases to a designated member of staff, referred to in this EMP as the Environmental Control Officer (ECO). The PR/ Luxury Investments One Hundred And Ninety Two Pty may decide to assign this role to one person for all three activities, or may assign a different ECO for each activity. The ECO will have the following responsibilities during the mining, operation and rehabilitation phases of these developments:

- Management and facilitation of communication between the Proponent, PR, the contractors, and Interested and Affected Parties (I&APs) with regard to this EMP;
- Conducting regular inspections (recommended minimum frequency is once every six months) with respect to the implementation of this EMP (monitor and audit the implementation of the EMP);
- Assisting the Contractor in finding solutions with respect to matters pertaining to the implementation of this EMP;
- Advising the PR on the removal of person(s) and/or equipment not complying with the provisions of this EMP;
- Making recommendations to the PR with respect to the issuing of fines for contraventions of the EMP; and
- Undertaking an annual review of the EMP and recommending additions and/or changes to this document.

## 2.3 CONTRACTOR

Contractors appointed by the Proponent are automatically responsible for implementing all provisions contained within the relevant chapters of this updated EMP. Contractors will be responsible for the implementation of this EMP applicable to any work outsourced to subcontractors.

**Table 10** applies to contractors appointed during the copper ore mining phase and **Table 11** to those appointed during the Mine rehabilitation phase. In order to ensure effective environmental management the aforementioned chapters should be included in the applicable contracts for outsourced construction, operation and maintenance work.

The tables in the following chapter (**Chapter 3**) detail the management measures associated with the roles and responsibilities that have been laid out in this chapter.

#### **2.4 Covid19 INFECTION PREVENTION AND CONTROL MEASURES**

Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus i.e. severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus that causes COVID-19 is mainly transmitted through droplets generated when an infected person coughs, sneezes, or exhales. These droplets are too heavy to hang in the air, and quickly fall on floors or surfaces. You can be infected by breathing in the virus if you are within close proximity of someone who has COVID-19, or by touching a contaminated surface and then your eyes, nose or mouth.

Employers must implement a code of practice to manage and prevent the spread of COVID-19. This is to ensure that mine employees returning to work and any other persons at the mine site, are protected from transmission of the coronavirus at the workplace, whilst providing guidance to all stakeholders regarding their roles and responsibilities in the management of the virus. The regulations require mine operators to supply protective equipment, screen all people entering the mine, provide standby quarantine facilities before transferring infected persons to the state quarantine centres, identify those with pre-existing conditions and carry out routine disinfection.

They also have to keep mineworkers between one and two metres apart. Failure to enforce the rules would constitute a violation of the nationwide Covid19 regulations as stipulated by the Head of State and the relevant arms of government to curb the spread of the corona virus.

After arrival of employees at the mining site, employers should comply with the following:

- Infection prevention and control measures should be applied to all modes of transport for employees, screening areas and active work areas.

#### **2.4.1 Education of workers should be given on:**

Maintaining physical distancing. Ensure employees and staff keep a distance of at least 1-2 m when in contact with other people; where this is not possible, issue appropriate facemasks, as per the Guidance on PPE for COVID-19.

- Regular washing of hands with soap.
- Regular sanitising of hands with alcohol-based hand rub (ABHR) or other appropriate sanitisers.
- Avoid touching your face areas (mouth, eyes and nose).
- Avoid physical hand contact such as handshakes.
- Avoid using other people's personal belongings such as stationery, cell phones and sharing food etc.
- When coughing or sneezing do not use your hands, rather use a tissue/toilet paper or the inside of your elbow.
- Use disposable tissues rather than a handkerchief; immediately dispose of these tissues in a closed bin and wash or sanitise your hands thereafter.
- Avoid big crowds and travelling.
- Avoid touching objects before sanitising, like steering wheels on machinery, toilet seats, tables and chairs.
- Coach and teach family members.
- Wearing and handling of appropriate PPE.

- a) Posters on Infection Prevention to be visible at designated areas of the mining claim sites (See Figure 1 for a typical Covid19 information poster).



Figure 1: Typical COVID-19 information poster to be placed at designated areas at the mining sites.

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- b) Sanitisers (as per World Health Organisation guidelines) should be made available at the entrance and exit points of all screening facilities, security entrances and all entrances and exits at the common areas at the mining camp, and at the starting points and end points of all places where close contact among workers is likely to occur, including in underground working places.
  - c) Sanitisers (as per World Health Organisation guidelines) should be available in each consultation room and testing areas at the screening centre, and sanitisation should take place before and after every consultation.
  - d) PPE is required for all staff, and PPE management programmes should be in place to ensure that PPE is worn correctly (including fit testing), replaced as necessary, stored correctly and disposed of safely.
  - e) Employees not able to socially distance by 1 m should be provided with PPE as per the Guidance on PPE for COVID-19.
  - f) Re-enforce compliance with the taking of chronic medication.

#### **2.4.2 Screening and testing at the designated areas**

Employers should comply with the following:

- a) Where there is company accommodation, initial pre-screening should be done at the residences, before getting to the work site. This is to isolate and quarantine any possible cases and suspects.
- b) At work, pre-screening of workers should be done before entering the facility (at the gate) either by nursing or security staff as per agreed-on protocol. This should include a temperature check.
- c) Employees with elevated temperatures should be referred directly to the isolation area for assessment by a Registered Nurse.
- d) Employees who do not have elevated temperatures should be referred to the site office for COVID-19 Risk Assessment and to complete a return to work medical (**Annexure B**).

## **2.5 Continuous Measures**

Employers should comply with the following:

- a) Training of staff and employees.
- b) Continually re-enforcing of universal hygiene precautions.
- c) Enforce physical distancing in the workplace.
- d) Continue use of facemasks.
- e) Promotion of good hygiene practices.

The employer should allocate an appropriate person to monitor and document compliance with this EMP specifically for ensuring adherence to the Covid19 regulations as continually prescribed as the pandemic is monitored and as per WHO guidelines.

### 3.0 MANAGEMENT ACTIONS

The aim of the management actions in this chapter of the updated EMP is to avoid potential impacts where possible. Where impacts cannot be avoided, measures are provided to reduce the significance of these impacts.

The following tables provide the management actions recommended to manage the potential impacts rated in the scoping-level EA conducted for these activities. These management actions have been organised temporally according to project phase:

- Applicable legislation (**Table 9**);
- Copper ore mining Actions (**Table 10**);
- Mine rehabilitation Management Actions (**Table 11**); and
- Decommissioning phase management actions (**Table 12**).

The responsible persons from the proponents' team have assessed these commitments in detail and have committed to the specific management actions where indicated in the tables below.

### 3.1 ASSUMPTIONS AND LIMITATIONS

This EMP has been updated and compiled with the acknowledgment of the following assumptions and limitations:

- This EMP has been updated based on the previous scoping-level Environmental Assessment (EA) conducted for the 6 mining claims 69776, 69777, 69778, 69779, 69780 & 69781. HEEC will not be held responsible for the potential consequences that may result from any alterations to the existing situation on the ground.
- It is assumed that mine labourers will be sourced mostly from the Otwani Village area and that migrant labourers (if applicable) will be housed in established accommodation facilities within Otwani Village.
- The engineering designs carried out for the mine operations & of the associated services infrastructure (roads, potable water, storm water, sewerage and electrical reticulations) will be informed by the engineers' plans and designs.



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## 3.2 APPLICABLE LEGISLATION

Legal provisions that have relevance to various aspects of these mining operations are listed in **Table 9: Legal provisions relevant to the ongoing mining activities below**. The legal instrument, applicable corresponding provisions and project relevance details are provided.

### 3.2.1 Regulatory Framework for Environmental Management in the Mining Sector

The objective of the updated Environmental Management Plan (EMP) is thus needed in order to assess the potential social and environmental impacts associated with the ongoing mining activities for copper ore, on mining claims; 69776 - 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia and also to formulate methods of rehabilitation of the quarries once they have been excavated for further processing.

The above is a listed activity in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012). Dumps, including overburden dumps and tailings dams, are similarly regulated.

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the following listed activities in **Table 8** were triggered by the proposed project:

**Table 8: List of triggered activities identified in the EIA Regulations which apply to the project**

Activity description and No(s):	Description of relevant Activity	The portion of the development as per the project description that relates to the applicable listed activity
<b>Activity 3.1</b> (Mining and Quarrying Activities)	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 project includes the mining of base & rare metals targeting copper ore for export purposes/ further processing.
<b>Activity 3.2</b> (Mining and Quarrying Activities)	Other forms of mining or extraction of any natural resources whether regulated by law or not.	The project includes the mining of base & rare metals targeting copper ore for export purposes/ further processing.
<b>Activity 3.3</b> (Mining and Quarrying Activities)	Resource extraction, manipulation, conservation and related activities.	The project includes the mining of base & rare metals targeting copper ore for export purposes/ further processing.

The above activities will be discussed in more detail in this EMP. Healthy Earth Environmental Consultants CC (HEEC) undertook an independent site specific scoping Environmental & Social Assessment (ESA) in order to formulate detailed mitigation measures for the above activities on behalf of the proponent, Luxury Investments One Hundred And Ninety Two Pty. The competent

authority is the Ministry of Environment, Forestry and Tourism: Department of Environmental Affairs (MEFT: DEA).

There are multiple legal instruments that regulate and have a bearing on good environmental management in Namibia. Table 9 below provides a summary of the legal instruments considered to be relevant to this development and the environmental assessment process.

**Table 9: Legislation applicable for the mining of copper ore on mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia .**

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
The Constitution of the Republic of Namibia as Amended	Article 91 (c) provides for duty to guard against “the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia.”  Article 95(l) deals with the “maintenance of ecosystems, essential ecological processes and biological diversity” and sustainable use of the country’s natural resources.	Sustainable development should be at the forefront of management of the intended mining activities.
Environmental Management Act No. 7 of 2007 (EMA)	Section 2 outlines the objective of the Act and the means to achieve that. Section 3 details the principles of Environmental Management	The management of this project should be informed by the EMA.
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate. GN 30 provides the regulations governing the environmental assessment (EA) process.	<b>Activity 3.1 (Mining and Quarrying Activities)</b> 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,

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
		<p>in terms of the Minerals (Prospecting and Mining Act), 1992.</p> <p><b>Activity 3.2 (Mining and Quarrying Activities)</b> Other forms of mining or extraction of any natural resources whether regulated by law or not.</p> <p><b>Activity 3.3 (Mining and Quarrying Activities)</b> Resource extraction, manipulation, conservation and related activities.</p>
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The copper ore mining activities should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The ESA process should incorporate the aspects outlined in the guidelines.
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the copper ore mining activities do not lead to the degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during the copper ore mining activities.
The Ministry of Environment, Forestry and Tourism (MEFT) Policy on HIV & AIDS	MEFT has recently developed a policy on HIV and AIDS. In addition it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	The proponent and its contractor have to adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with similar projects has shown that a significant health risk is created

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
		when migrant mine workers/labourers interact with local communities.
Labour Act No. 11 of 2007	Chapter 2 details the fundamental rights and protections. Chapter 3 deals with the basic conditions of employment.	Given the employment opportunities presented by the copper ore mining activities, compliance with the law is essential.
Public and Environmental Health Act of 2015	This Act (GG 5740) provides a framework for a structured uniform public and environmental health system in Namibia. It covers notification, prevention and control of diseases and sexually-transmitted infections; maternal, ante-natal and neo-natal care; water and food supplies; infant nutrition; waste management; health nuisances; public and environmental health planning and reporting. It repeals the Public Health Act 36 of 1919 (SA GG 979).	The copper ore mining activities are to comply with these legal requirements.
Nature Conservation Ordinance No. 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants.	Indigenous and protected plants have to be managed within the legal confines.
Environmental Assessment Policy of Namibia (1995)	The Policy seeks to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.	This EMP considers this term of Environment.
Minerals (Prospecting and Mining) Act, 1992 (Act 33 1 of 1992)	To provide for the reconnaissance, prospecting and mining for, and disposal of, and the exercise of control over, minerals in Namibia; and to provide for matters	The activity involves the mining of copper ores for commercial purposes/further processing.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	<p>incidental thereto.  “mineral” means any substance, whether in solid, liquid or gaseous form, occurring naturally in, on or under any land and having been formed by, or subjected to, a geological process, excluding -(c) subject to the provisions of subsection (2), soil, sand, clay, gravel or stone (other than rock material specified in Part 2 of Schedule 1) if they are bona fide required for purposes of -  (i) agriculture, building works, fencing or road making;  (ii) the manufacture of bricks and tiles;</p>	
Soil Conservation Act 6 of 1969 Ministry of Agriculture, Water and Forestry	This Act covers the prevention and combating of soil erosion; the conservation, improvement and manner of use of the soil and vegetation; and the protection of water sources	Open pits left behind after copper ore mining should not be polluted or left un-rehabilitated.

**This EMP was updated and compiled in accordance with the EIA Regulations.**

### 3.3 PROJECT LOCATION



Figure 2: Location of the 6 mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia (MME Portal, 2020).

### 3.4 COPPER ORE MINING PHASE

The PR should ensure that the management actions detailed in **Table 10**, below should be adhered to during the operation of the copper ore mining activities.

**Table 10: Copper ore Mining Phase Management Actions**

Aspect	Management Actions	Responsibility
Environmental Incidents	<ul style="list-style-type: none"> <li>• The ECO on site shall maintain a register of all environmental incidents occurring as a result of the activities associated with the project. Environmental incidents that shall be recorded include (but are not limited to):               <ul style="list-style-type: none"> <li>➤ Fires;</li> <li>➤ Drowning;</li> <li>➤ Accidents (e.g. traffic);</li> <li>➤ Spills of hazardous materials, contaminating soil or water resources;</li> <li>➤ Non-compliances with applicable legislation; and</li> <li>➤ Non-compliances with this EMP.</li> </ul> </li> <li>• Environmental incident reports shall include (as a minimum) a description of the incident, the actions taken to contain any damage to the environment, personnel, or the public, and the actions taken to repair / remediate any such damage.</li> <li>• Additional measures shall be prescribed that may be required to remediate damage resulting from the incident and / or to prevent similar incidents occurring in the future.</li> </ul>	ECO
Traffic	<ul style="list-style-type: none"> <li>• Ensure that road junctions have good sightlines.</li> <li>• Limit the type of vehicle (heavy trucks) allowed on site.</li> <li>• Adhere to the speed limit. If permissible, caution signs and 40 km/hr signs shall be placed at regulation distance from heavy vehicle crossing signs at the intersections of the access tracks and the C43 road.</li> <li>• Designate no-drive zones.</li> </ul>	ECO



Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary by keeping a number plate register of all vehicles transporting copper ore at the site and restricting access to authorised contractors.</li> </ul>	
Copper ore mining claim areas (69776, 69777, 69778, 69779, 69780 & 69781).	<ul style="list-style-type: none"> <li>Copper ore should be sourced from mining claims with a valid ECC.</li> <li>The copper ore mining claims must be clearly demarcated by means of a perimeter stock-proof fence with a lockable gated entrance.</li> <li>Copper ore mining and resultant operations shall only take place within this demarcated area/claim.</li> <li>A detailed photographic record of the demarcated mining claim areas, prior to any mining activities, shall be taken. These records are to be kept by the Proponent and PR for reference purposes during the rehabilitation of the site.</li> <li>There will be <b>'No unauthorised access'</b> signs at the mining claim gates until to restrict entry and/or harm to people not involved in the copper ore mining operations.</li> </ul>	ECO & Contractor
EMP training	<ul style="list-style-type: none"> <li>All workers at the site are to undergo EMP training that should include as a minimum the following:               <ul style="list-style-type: none"> <li>Explanation of the importance of complying with the EMP.</li> <li>Discussion of the potential environmental impacts of the intended copper ore mining and mine rehabilitation activities.</li> <li>Employees' roles and responsibilities, including emergency preparedness and response requirements.</li> <li>Explanation of the mitigation measures that must be implemented when particular work groups carry out their respective activities.</li> <li>The potential consequences of departure from specified operating procedures; and rewards for enhancing mitigation measures or avoiding negative environmental effects.</li> </ul> </li> </ul>	ECO & Contractor
Fauna and Flora	<ul style="list-style-type: none"> <li>Prevent the destruction of protected tree species.</li> <li>Encourage the regrowth and regeneration of trees with exposed roots at the site.</li> <li>The excavation of the copper ore should incorporate existing trees<sup>1</sup>.</li> </ul>	ECO & Contractor

<sup>1</sup>a "tree" is defined as an indigenous woody perennial plant with a trunk diameter ≥150 mm

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• The Contractor should compile a Tree Management Plan which should include the following as a minimum:</li> <li>• Trees if not already accounted for in an existing Geographic Information System (GIS), should be surveyed, co-ordinates/location incorporated into the Contractor's GIS, marked with paint (or other means so as to be readily visible) and protected;</li> <li>• Trees, which are impossible to conserve, need to be identified and their location recorded on a map;</li> <li>• The Contractor should apply to the relevant authority (Ministry of Environment, Forestry &amp; Tourism) for a permit to remove these trees.</li> <li>• A list should be compiled of all trees to be removed detailing the location of the tree, the species as well as which trees will be planted to replace these. The nursery where these trees will be sourced from should also be included;</li> <li>• Each tree that is removed needs to be replaced with an indigenous tree species;</li> <li>• Some of these trees can be obtained at the nearest forestry office or at a commercial nursery such as the Forestry office in Opuwo. Assistance can be sought from the nearest forestry office regarding nearby nurseries where additional trees may be bought and advice sought.</li> <li>• Only a limited width +/- 5 m on the side of the access roads may be partially cleared of vegetation.</li> <li>• Workers are prohibited from collecting wood or other plant products on or near the site.</li> <li>• No alien species may be planted on or within the existing site.</li> <li>• Prevent contractors from collecting wood and veld food such as amphibians, migrating birds, etc. during the copper ore mining phase.</li> <li>• Prevent contractors from fishing in the nearby ephemeral rivers or catching aquatic species.</li> </ul>	
Lay-down areas and materials camp	<ul style="list-style-type: none"> <li>• Suitable locations for the contractors lay-down areas and materials camp should be identified with the assistance of the PR and the following should be considered in selecting these sites:</li> <li>• The areas designated for the services infrastructure should be used as far as possible.</li> </ul>	<b>ECO &amp; Contractor</b>

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• Second option should be degraded land.</li> <li>• Avoid sensitive areas (e.g. wetlands/rivers/drainage lines)</li> </ul>	
Hazardous waste	<ul style="list-style-type: none"> <li>• All heavy duty vehicles and equipment on site should be provided with a drip tray.</li> <li>• All heavy duty delivery vehicles should be maintained regularly to prevent oil leakages.</li> <li>• Maintenance and washing of vehicles should take place only at a designated workshop area.</li> <li>• Spilled cement and/or concrete (wet or dry) should be treated as hazardous waste and disposed of by the end of each day in the appropriate hazardous waste containers.</li> <li>• All hazardous substances (e.g. fuel etc.) or chemicals should be stored in a specific location on an impermeable surface that is bunded - with a volume of 120 % of the largest single storage container or 25 % of the total storage containers, whichever is greater.</li> </ul>	<b>ECO &amp; Contractor</b>
Surface and Ground Water Impacts	<ul style="list-style-type: none"> <li>• It is recommended that copper ore mining takes place outside of the rainy season in order to limit erosion &amp; flooding on site and surface water pollution.</li> <li>• No dumping of waste products of any kind in or in close proximity to surface water bodies.</li> <li>• Heavy duty vehicles should be kept out of any surface water bodies and the movement of vehicles should be limited where possible to the existing access roads and tracks.</li> <li>• Contaminated runoff from the sites should be prevented from entering the surface water bodies.</li> <li>• Workers should be given ablution facilities at the sites that are located at least <b>30 m</b> away from any surface water and regularly serviced.</li> <li>• Washing of personnel or any equipment should not be allowed on site.</li> </ul>	<b>ECO &amp; Contractor</b>
Topsoil	<ul style="list-style-type: none"> <li>• When excavations are carried out, topsoil<sup>2</sup> should be stockpiled in a demarcated area and used in profiling and rehabilitating of the depleted, open pits around the mining claim sites.</li> </ul>	<b>ECO &amp; Contractor</b>

<sup>2</sup> Topsoil is defined here as the top 150mm of surface material, which accounts for the seedbank.

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>Stockpiled topsoil should be used to rehabilitate post-harvesting degraded areas and/or other nearby degraded areas within the Otwani Village area in consultation with the Traditional Authority.</li> </ul>	
Soil Erosion	<ul style="list-style-type: none"> <li>Clear the vegetation of the project area in phases during the copper ore mining period in order to keep the soil more compacted as well as to limit overall disturbance to the area over time.</li> <li>It is recommended that most copper ore mining takes place outside of the rainy season in order to limit potential flooding and the run off of loose soil causing further erosion.</li> <li>Appropriate erosion control structures must be put in place where soil may be prone to erosion.</li> <li>Checks must be carried out at regular intervals to identify areas within the mining claim site where erosion is occurring. Appropriate remedial actions are to be undertaken wherever erosion is evident.</li> </ul>	ECO & Contractor
Rehabilitation	<ul style="list-style-type: none"> <li>Upon completion of the copper ore mining phase consultations should be held with the Traditional Authority &amp; local community regarding the post-copper ore mining use of remaining excavated areas (if applicable) and to identify priority areas.</li> <li>Sand/rubble at the site should be levelled so it can be reclaimed for other purposes once the copper ore mining has ceased and rather than leaving the mines open which will pose a threat to people and animals in the area.</li> <li>In the event that no post-operation uses are requested, all excavated/degraded areas need to be rehabilitated as follows: <ul style="list-style-type: none"> <li>Excavated areas may only be backfilled with clean or inert fill. No material of hazardous nature (e.g. sand removed with an oil spill) may be dumped as backfill.</li> <li>Rehabilitated excavated areas need to match the contours of the existing landscape.</li> <li>The rehabilitated area should not be higher (or lower) than nearby drainage channels. This ensures the efficiency of re-vegetation and reduces the chances of potential erosion.</li> </ul> </li> <li>Topsoil is to be spread across excavated areas evenly.</li> </ul>	ECO & Contractor

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• Deep ripping of areas to be rehabilitated is required, not just simple scarification, so as to enable rip lines to hold water after heavy rainfall.</li> <li>• Ripping should be done along slopes, not up and down a slope, which could lead to enhanced erosion.</li> </ul>	
HIV/AIDS and TB awareness	<ul style="list-style-type: none"> <li>• The Contractor should approach the Ministry of Health and Social Services to co-opt a health officer to facilitate HIV/AIDS and TB education programmes periodically on site during the project operation.</li> <li>• A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted diseases.</li> <li>• Provide free condoms in the workplace and to local community throughout project operation.</li> <li>• Facilitate access to Antiretroviral medication</li> <li>• Personnel should not overnight at the copper ore mining claim sites, but only the security personnel.</li> </ul>	ECO & Contractor
Road safety	<ul style="list-style-type: none"> <li>• Demarcate roads clearly.</li> <li>• Off-road driving should not be allowed.</li> <li>• All vehicles that transport materials to and from the site must be roadworthy.</li> <li>• Drivers that transport materials should have a valid driver's license and should adhere to all traffic rules.</li> <li>• Loads upon vehicles should be properly secured to avoid items falling off the vehicle.</li> <li>• Limit and control the number of access points to the mining claim sites.</li> <li>• The road leading to the mining claims should be properly maintained so as to reduce dust emissions when heavy vehicles travel on them.</li> <li>• Consideration should be given to possibly tar the road leading to the mining claims which could reduce dust emissions onsite.</li> </ul>	ECO & Contractor
Safety around work sites	<ul style="list-style-type: none"> <li>• Excavations/pits should be left open for the shortest time possible.</li> <li>• Excavate short lengths of trenches and box areas for services or foundations in a manner that will not leave the trench unattended for more than 24 hours.</li> <li>• Demarcate excavated areas and topsoil stockpiles with danger tape.</li> </ul>	ECO & Contractor

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• Provide additional warning signage in areas of movement and in “no personnel” areas where workers are not active.</li> <li>• Mine pits are to be fenced-off with stock-proof perimeter fencing.</li> <li>• Work areas must be set out and isolated with danger tape on a daily basis.</li> <li>• All materials and equipment are to be stored only within set out and demarcated work areas.</li> <li>• Only copper ore mining personnel authorised by Luxury Investments One Hundred And Ninety Two Pty will be allowed within these work areas.</li> <li>• 2 fire extinguishers should be available at fuel storage areas.</li> <li>• Comply with all waste related management actions stated above in this table.</li> </ul>	
Ablutions	<ul style="list-style-type: none"> <li>• Separate toilets should be available for men and women and should clearly be indicated as such.</li> <li>• Portable toilets (i.e. easily transportable) should be available at the Mine site: <ul style="list-style-type: none"> <li>• 1 toilet for every 15 females.</li> <li>• 1 toilet for every 30 males.</li> </ul> </li> <li>• Sewage needs to be removed on a regular basis to an approved (municipal) sewage disposal site. Alternatively, sewage may be pumped into sealable containers and stored until it can be removed.</li> <li>• Workers responsible for cleaning the toilets should be provided with latex gloves and masks.</li> </ul>	<b>ECO &amp; Contractor</b>
Open fires	<ul style="list-style-type: none"> <li>• No open fires may be made anywhere on the mining claim sites.</li> </ul>	<b>ECO</b>
General health and safety	<ul style="list-style-type: none"> <li>• A fully stocked first aid kit should permanently be available on-site as well as an adequately trained member of staff capable of administering first aid.</li> <li>• All workers should have access to the relevant personal protective equipment (overalls, hard toe boots, goggles, dust masks, sun hats heavy duty gloves etc.) including Covid19 PPE (masks &amp; sanitisers etc.).</li> <li>• Sufficient potable water reserves should be available to workers at all times.</li> </ul>	<b>ECO &amp; Contractor</b>

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• No person should be allowed to smoke close to fuel storage facilities or portable toilets (if toilets are chemical toilets – the chemicals are flammable).</li> <li>• No workers should be allowed to drink alcohol during work hours.</li> <li>• No workers should be allowed on the mining claims if under the influence of alcohol.</li> </ul>	
Dust	<ul style="list-style-type: none"> <li>• A watering truck should be used on gravel roads with the most heavy vehicle movement especially during dry and windy conditions. However, due consideration should be given to water restrictions during times of drought.</li> <li>• The use of waterless dust suppression means (e.g. lignosulphonate products such as Dustex) should be considered.</li> <li>• Cover any stockpiles with plastic to minimise windblown dust.</li> <li>• Dust protection masks should be provided to workers if they complain about dust.</li> <li>• During high wind conditions the contractor must make the decision to cease works until the wind has calmed down.</li> </ul>	ECO & Contractor
Noise	<ul style="list-style-type: none"> <li>• Work hours should be restricted to between 08h00 and 17h00 where excavation involving the use of heavy equipment, power tools and the movement of heavy vehicles is less than 500 m from residential areas. If an exception to this provision is required, all residents and business owners within the 500 m radius should be given 1 week's written notice.</li> <li>• If workers are to be exposed to noise levels above 85dB for continuous extended periods of more than two hours, they are to be provided with ear muffs and allowed to take 10-15 minute breaks away from the noise source.</li> </ul>	ECO & Contractor
Recruitment of labourers	<ul style="list-style-type: none"> <li>• The Contractor should compile a formal recruitment process including the following provisions as a minimum:</li> <li>• Adhere to the legal provisions in the Labour Act No. 11 of 2007 for the recruitment of labour (target percentages for gender balance, optimal use of local labour and SME's, etc.).</li> <li>• Recruitment should not take place at the copper ore mining claim sites.</li> </ul>	ECO & Contractor

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• Ensure that all sub-contractors are aware of recommended recruitment procedures and discourage any recruitment of labour outside these agreed upon procedures.</li> <li>• All contractors should give preference in terms of recruitment of sub-contractors and individual labourers to those who are qualified and from the project area and only then look to surrounding towns.</li> <li>• Clearly explain to all job-seekers the terms and conditions of their respective employment contracts (e.g. period of employment etc.) – make use of interpreters where necessary.</li> </ul>	
Communication plan	<ul style="list-style-type: none"> <li>• The Contractor or PR should draft a Communication Plan, which should outline as a minimum the following:</li> <li>• How Interested and Affected Parties (I&amp;APs), who require on-going communication for the duration of the operation period, will be identified and recorded and who will manage and update these records;</li> <li>• How these I&amp;APs will be consulted on an on-going basis;</li> <li>• Make provision for grievance mechanisms – i.e. how concerns can be lodged/ recorded and how feedback will be delivered as well as further steps of arbitration in the event that feedback is deemed unsatisfactory.</li> </ul>	<p><b>ECO &amp; Contractor</b></p>
General communication	<ul style="list-style-type: none"> <li>• The PR must appoint an ECO to liaise between the Contractor, I&amp;APs and Luxury Investments One Hundred And Ninety Two Pty's management.</li> <li>• The Contractor shall at every bi-monthly site meeting report on the status of the implementation of all provisions of the EMP.</li> <li>• The Contractor should implement the EMP awareness training as stipulated above in this table.</li> <li>• The Contractor must list the I&amp;APs of the project and their contact details with whom on-going communication would be required for the duration of the contract. This list, together with the Communication Plan must be agreed upon and given to the PR before operation commences/resumes.</li> <li>• The Communication Plan, once agreed upon by the Traditional Authority, shall be legally binding.</li> </ul>	<p><b>ECO &amp; Contractor</b></p>



Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• A copy of the EMP must be available at the site office and should be accessible to all I&amp;APs.</li> <li>• Key representatives from the above mentioned list need to be invited to attend monthly site meetings to raise any concerns and issues regarding progress to rehabilitate the excavated areas and surrounding mines/ pits.</li> <li>• The Contractor should liaise with the proponent regarding all issues related to community consultation and negotiation before operation commences/resumes.</li> <li>• A procedure should be put in place to ensure that concerns raised have been followed-up and addressed.</li> <li>• All people on the I&amp;APs list should be informed about the availability of the complaints register and associated grievance mechanisms in writing by the PR prior to the commencement of site activities.</li> </ul>	
Archaeology	<ul style="list-style-type: none"> <li>• Should a heritage site or archaeological site be uncovered or discovered during the copper ore mining phase of the project, a "chance find" procedure should be applied in the order they appear below:</li> <li>• If operating machinery or equipment stop work;</li> <li>• Demarcate the site with danger tape;</li> <li>• Determine GPS position if possible;</li> <li>• Report findings to the site foreman;</li> <li>• Report findings, site location and actions taken to superintendent;</li> <li>• Cease any works in immediate vicinity;</li> <li>• Visit find site and determine whether work can proceed without damage to findings;</li> <li>• Determine and demarcate exclusion boundary;</li> <li>• Site location and details to be added to a Geographic Information System (GIS) for field confirmation by archaeologist;</li> <li>• Inspect site and confirm addition to copper ore mining site GIS;</li> <li>• Advise the National Heritage Council (NHC) and request written permission to remove findings from work area; and</li> <li>• Recovery, packaging and labelling of findings for transfer to National Museum.</li> </ul>	ECO & Contractor

Aspect	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>Should human remains be found, the following actions will be required:</li> <li>Apply the chance find procedure as described above;</li> <li>Schedule a field inspection with an archaeologist to confirm that remains are human;</li> <li>Advise and liaise with the NHC and Police; and</li> <li>Remains will be recovered and removed either to the National Museum or the National Forensic Laboratory.</li> </ul>	

### 3.5 MINE REHABILITATION PHASE (Continuous)

The management actions included in **Table 11** below applies during the continuous mine rehabilitation phase of the mining operations.

**Table 11: Mine Rehabilitation Phase Management actions**

Environmental Feature	Management Actions	Responsibility
EMP training	All contractors appointed for the transportation of the copper ore on mining claims 69776, 69777, 69778, 69779, 69780 & 69781 must ensure that all personnel are aware of necessary health, safety and environmental considerations applicable to their respective work.	ECO & Contractor
Monitoring	<p>The ECO should monitor the implementation of the EMP:</p> <ul style="list-style-type: none"> <li>The ECO should regularly inspect the conditions around the copper ore mining claim site before work starts; and</li> <li>The ECO should inspect the mining claim site at the end of the extraction period.</li> </ul>	ECO
Water and waste management	<ul style="list-style-type: none"> <li>Ensure that the infrastructure at the copper ore mining site is connected to the mine drainage and wastewater reticulation.</li> <li>Regular preventative maintenance should be carried out on the infrastructure to ensure that risks of overflows are minimised.</li> <li>A no-go buffer area of at least <b>30 m</b> should be allocated to any water bodies in the area.</li> </ul>	ECO & Contractor

Environmental Feature	Management Actions	Responsibility
	<ul style="list-style-type: none"> <li>• No dumping of waste products of any kind in or in close proximity to any surface water bodies.</li> <li>• Sufficient weather and scavenger-proof bins (with lids, to prevent the escape of litter) shall be provided, and be easily accessible at all points where wastes are generated.</li> <li>• The site shall be kept clean and free of litter and no litter from the site shall be allowed to disperse to surrounding areas.</li> <li>• All personnel shall be instructed to dispose of all waste in the proper manner.</li> <li>• The Contractor shall identify and separate materials that can be reused or recycled to minimise waste e.g. metals, packaging and plastics, and provide separate marked bins for these items.</li> <li>• All materials (e.g. bags of cement) must be suitably stored and protected, so that they do not become damaged and unusable.</li> <li>• The Contractor shall be responsible for the regular disposal (at a suitable waste rock dumpsite) of all waste generated as a result of the copper ore mining.</li> <li>• Contaminated runoff from the various operational activities should be prevented from entering any surface water bodies.</li> <li>• Ensure that surface water accumulating on-site are channelled and captured through a proper storm water management system to be treated in an appropriate manner before disposal into the environment.</li> <li>• Disposal of waste from the mining claims should be properly managed.</li> <li>• No waste may be burned on site.</li> <li>• The frequency of collections will be such that waste containment receptacles do not unduly accumulate or overflow.</li> </ul>	

Environmental Feature	Management Actions	Responsibility
Energy efficiency	<ul style="list-style-type: none"> <li>The use of solar energy should be encouraged to provide for general lighting and heating of water and buildings around the mine sites.</li> <li>The use of water saving initiatives should be incorporated within the mine workers' housing design in order to reduce water demand.</li> </ul>	Contractor

### 3.6 DECOMMISSIONING PHASE

With time all mines will close. This phase normally presents a complete new set of impacts to the environment that require serious attention of the mining company and other local authorities. To that effect a well-planned mine closure programme should be put in place.

It is recommended that in the event of mine closure, decommissioning be carried as per guidelines stated in relevant extracts of the Minerals (Prospecting & Mining) Act, 1992 (Act No. 33 of 1992). Rehabilitation must be taken as an on-going process to ensure that corrective measures are implemented on time. **Table 12** is a guideline to the decommissioning plan, whereby an active care mine closure is going to be implemented.

**Table 12: Decommissioning plan**

Decommissioning Phase			
Possible Impact	Mitigation	Responsibility	Monitoring Agent
<b>Physical/Biological</b> -Land degradation & loss of aesthetic value	-Establish a vegetation cover as soon as possible (stabilization) -Vegetate cleared area with indigenous trees -Fencing of the dangerous areas	MINE OWNER	-ECO -MEFT, -MAWLR
-Injury to people and livestock	-Complete filling up of the trenches -Barricade the old workings with concrete -Fencing of the dangerous areas	MINE OWNER	-ECO -MEFT, -MAWLR
-Contaminated surface and underground water. -Soil pollution. -Acid water drainage	-clean up spills (chemicals, diesel and oil) -Water quality analysis. -Monitor soil and water quality for a specified time after closure. -Aquatic life monitoring	MINE OWNER	-ECO -MEFT, -MAWLR
Resurgence of hazardous chemicals	-Treatment of hazardous chemicals (if any) -Neutralization -Precipitation, oxidation, reduction and acid/alkali hydrolysis	MINE OWNER	-ECO -MEFT, -MAWLR -MHSS
Accumulated solid waste	-Disposal of solid waste through source sorting, recycling, aerobic	MINE OWNER	-ECO -MEFT, -MAWLR

	decomposition (composition), incineration or depositing in waste rock dumpsite and levelling of dumpsite to match the natural contours of the surrounding topography.		-MHSS
Loss of biodiversity	-Eliminate environmental damage through reclamation. -Site restoration through regeneration of the forest. -Restore chemical, biological and physical stability of site. -Allow productive land use.	MINE OWNER	-ECO -MEFT, -MAWLR
Compacted soil	-Rehabilitate areas affected by excessive soil compaction and oil spillage	MINE OWNER	-ECO -MEFT, -MAWLR -MME
<b>Social/Economic</b> -Laying off workers -Loss of income -Drop in the standard of living	-Catering of welfare of laid off workers -Pension schemes -Creation of income generating projects for laid off workers -Secure alternative employment for workers	MINE OWNER	-ECO -SSC
-Infrastructure may become derelict -Derelict building may detract from the value of surrounding properties	-Return of community access to infrastructure -Educate locals on the utilization of the mining infrastructure.	MINE OWNER	Ministry of Works and Transport
-Possible outbreaks of diseases	Educate communities on dangers of STIs and waterborne diseases	MINE OWNER	Ministry of Health & Social Services(MHSS)
Damaged roads	Repair damaged roads	MINE OWNER	-Roads Authority

In addition to the plan above, decommissioning should also be carried out as per the following guidelines:

- The Proponent/Owners and Managers of all mines should be capable of implementing responsible environmental management practices. The preparation of environmental management plans will facilitate this process and is strongly encouraged.
- All mines should be rehabilitated either progressively or at the end of mining. Each mining claim site should be left in a safe well drained and maintenance-free state, blending in as much as possible with the surrounding landscape.
- Mine operators should ensure that funds are available for progressive and final site (closure) rehabilitation.
- Unless otherwise approved (by an Inspector of mines) at mining closure, all machinery structures and buildings should be removed from the site and concentrate slabs broken up and buried. The site should be ripped; top soiled (if available), fertilized and re-vegetated using indigenous plant species. Alternatively, if approved, certain structures can remain for the benefit of the next land user.
- Surface and ground waters should be effectively managed to prevent contamination by mining operations.

- Effluent from mining and milling operations, i.e tailings should be effectively contained and only released into the environment if the water quality satisfies the standards of the **Water Quality Guidelines (Annexure A)**.
- Measures to be taken to control noise and dust from mining/milling/hauling operations to ensure a comfortable and health working environment as specified in the **Labour Act No. 11 of 2007**.
- Measures should be taken to minimise excessive ground vibrations and air-blasts over pressure due to blasting. Peak particle velocities of 5 mm/sec and air-blasts over pressures of 120 dB (peak) should not be exceeded at the boundaries of the mining claim areas.
- Mine operators should ensure that refuse is deposited in proper containers and disposed of responsibly. Fuel and oil spills should be effectively contained.
- Where practical, buildings, crushing plant, stockpiles and dumps should be designed and located to reduce visual impact. Advantage should be taken of natural topography and existing vegetation and if this not a practical option, a screen of trees should be established.
- Measures should be taken to prevent or minimise soil erosion.
- As far as is practical, top soil should be stripped from all areas to be distributed by mining operations/milling and used immediately if possible or preserved for later rehabilitation.
- Areas disturbed by mining should be re-vegetated as far as is practical using indigenous grass or tree species. However, on sites such as tailings/waste dumps, where it is important to establish a vegetative cover as soon as possible on difficult growing mediums, the use of fast growing exotic species is acceptable. Care should be taken to prevent the entry and spread of noxious plants.
- Diversion channels or ephemeral river course diversion should be constructed in accordance with sound engineering principles to ensure that soil erosion is minimised.
- Cyanide, mercury, dynamite and other toxic materials should be transported stored and handled in a safe and acceptable manner. They should be stored in safe place, fenced to prevent entry of unauthorised persons. The owner /manager should ensure that toxic materials do not escape into the surrounding rivers/ground waters.
- Mine operators should strive to conserve local flora and fauna species and avoid unnecessary destruction of both.
- Unique archaeological, historical, geological and scenic features should be protected at all mining and exploration sites.
- Residents of Otwani Village in the vicinity of the mine should not be subjected to excessive airborne emissions (including dust, gases and smokes), liquid effluent, noise, ground vibrations and air blast from mining/milling/refining/haulage operations.
- Mine tailings and slimes should be disposed of/stored in impoundments constructed in accordance with sound engineering principles. The dams should be sited to avoid the encountering of permeable sub-soil and/or fracture systems and an adequate drainage system should be incorporated in the design. They should be sited so that their catchments are minimal and should be designed to withstand significant rainfall events.

- 
- Unless otherwise approved, at the cessation of mining, or earlier if practical, waste rock dumps should be stabilized by reducing the slope angle and re-vegetated. Topsoil should be used if practicable.
  - All shafts not being used should be securely capped/otherwise made safe to prevent the entry of persons/livestock/wild animals.
  - The final land use of open cast mine /quarry should be determined prior to the cessation of mining. For example, if the site is to be used for water storage, then at the end of the mine life, drainage could be directed into the pit. If the pit/quarry is to be used for any other purpose then drainage should not be diverted around the site.
  - The final land use will dictate the amount of reshaping required on the pit faces. Where practical the slope of the steep faces should be reduced and benches top soiled (if available) to facilitate re-vegetation and blending with the surrounding landscape.
  - If practical quarry faces should be oriented to minimise their visual impact from public areas.
  - Dangerous excavations should be made safe to prevent entry of persons/stock.
  - In strip mining operations, overburden material, which is adverse to plant growth, should be buried and every effort should be made to recover and store top soil from mining path for later rehabilitation.
  - Heap leach operations should be designed to ensure that there is zero discharge of process fluid on surface waters or ground waters.
  - Unless otherwise approved, heap leach pads should be rehabilitated after leaching by detoxification, re-contouring, re-top soiling and re-vegetation so that they will be in stable maintenance free condition. Alternatively the heaps could be used to backfill nearby pits.
  - In general mining activities should not be carried out closer than 30 metres from the present course of any ephemeral river. In special circumstances, where it can be demonstrated that sedimentation can be mined, provided that present river banks remained undisturbed.
  - Mine rehabilitation should be carried out progressively to ensure that a minimum of ground is disturbed at any one time. A maximum of 2 hectares shall be un-rehabilitated at any one time unless otherwise approved.
  - The mining and rehabilitation method should ensure each layer disturbed should be replaced to its original sequence at topsoil as its final layer. All disturbed areas should be progressively rehabilitated.
  - Tailings and Slimes from wasting plants should be expounded in properly constructed dams unless otherwise approved.
  - Air and water emissions from mining and smelters should be effectively treated before release to the environmental to ensure that they are of acceptable quality.
  - All exploration drill holes should be capped, plugged/filled in, either progressively or at the end of the program.
  - All drilling sites, trenches and pits should be rehabilitated (i.e. backfilled and re-vegetated) after the cessation of exploration.
  - Each site should be left in a clean and tidy condition with all refuse removed.

Mine closures can be planned for and should form part of an integrated land use strategy that involves the community. The decommissioning of the copper ore mining at the 7 claim sites is envisaged in the future. Planned closure, in consultation with the community, provides the opportunity to develop alternative land uses through rehabilitation, and to use the remaining infrastructure for other economic purposes such as livestock farming. When the event occurs some recommendations have been outlined in **Table 13**.

**Table 13: Decommissioning phase management actions**

Environmental Feature	Management Actions
Deconstruction activity	Many of the mitigation measures prescribed for the copper ore mining & mine rehabilitation activities ( <b>Table 10 &amp; 11</b> above) would be applicable to some of the decommissioning activities. These should be adhered to where applicable.
Rehabilitation	In the event that decommissioning is deemed necessary, excavations need to be rehabilitated according to the management actions laid out in <b>Table 10 &amp; 11</b> above.

#### 4.0 CONCLUSION AND RECOMMENDATIONS

The ongoing mining activities on mining claims; 69776 – 69781, situated at Otwani, Opuwo Rural Constituency, Kunene Region, Namibia have brought both positive and negative impacts. The copper ore mine has benefited and brought employment & development to the surrounding communities in the Epupa area. No major impacts of the project are expected during the operation phase since the copper ore will be crushed in its raw form and further processing done offsite. Minimal vegetation will be cleared from the site, the existing niche ecosystems will be greatly affected. Mine vehicles and equipment will bring noise and oil spillages, if not fitted with mufflers and drip trays. Most of the projected impacts will be significant and hence the need for a comprehensive and strict environment management plan to be implemented along the entire project life span and decommissioning phases. Management of residual impacts also need to be monitored and mitigated to offset the footprint of the copper ore mine. On the basis of the above preliminary analysis and taking cognizance of the fact that the proponent has proved financially and environmentally credible, it is our recommendation that the project be allowed to continue provided the mitigation measures suggested in this updated EMP are strictly adhered to as deemed necessary by MEFT:DEA.

It is anticipated that the environmental management plans outlined in this report will be enforced not only as a policy obligation but to benefit Luxury Investments One Hundred And Ninety Two Pty and the surrounding community in the Otwani Village area. It should be noted that environmental management is still a challenge to mining projects hence it is imperative for them to be always monitored by the responsible authorities so as to achieve environmental protection. It is hoped that this updated EMP report will assist Luxury Investments One Hundred And Ninety Two Pty towards reducing the negative impacts of this project for the benefit of the next land user.

In line with the above, it is recommended that Luxury Investments One Hundred And Ninety Two Pty embark on the following:



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- Appoint a qualified mine manager in terms of Minerals (Prospecting & Mining) Act, 1992 (Act No. 33 of 1992).
  - Solid Waste Disposal guidelines should be obtained for best practice at the MEFT:DEA.
  - Establish all infrastructures as per a Siting of Works plan approved by the Ministry of Mines and Energy.
  - Register the boreholes with Ministry of Agriculture, Water and Land Reform.
  - Appoint an environmental consultant (HEEC) to perform environmental audits and prepare biannual reports about the project's progress
  - Get inspection certificates from the Mining Commissioner as and when they are due
  - Involve the Otwani village community and employ locals first.

The usual practice with EMPs is that they indicate how the proponent (Luxury Investments One Hundred And Ninety Two Pty) will comply with established environmental and social standards. The set of proponent (Luxury Investments One Hundred And Ninety Two Pty) and Counterpart EMPs (this document) will provide a good basis for addressing environmental and social issues at the base and rare metal mining sites, with copper ore being the target mineral. However, they will not provide an adequate understanding of the impact of mining activities on public health and ecosystem functions downstream from mining operations, or provide an adequate basis for setting mitigation priorities. This will require biennial environmental compliance auditing by the consultants (HEEC) or additional work beyond the scope of the site specific mining operations and Counterpart EMPs, or the cumulative Environmental Impact Assessments for the base & rare metal mining activities that provided the original baseline.

## ANNEXURE A: WATER QUALITY GUIDELINES

### THE WATER ACT, 1956 (ACT 54 OF 1956) AND ITS REQUIREMENTS IN TERMS OF WATER SUPPLIES FOR DRINKING WATER AND FOR WASTE WATER TREATMENT AND DISCHARGE INTO THE ENVIRONMENT

#### 1. INTRODUCTION

The provisions of the Water Act are intended, amongst other things, to promote the **maximum beneficial use of the country's water supplies and to safeguard water supplies from avoidable pollution.**

The drinking water guidelines are not standards as no publication in the Government Gazette of Namibia exists to that effect. However the Cabinet of the Transitional Government for National Unity adopted the existing South African Guidelines (461/85) and the guidelines took effect from 1 April 1988 under the signature of the then Secretary for Water Affairs.

The sections of the Water Act that relate to the discharge of industrial effluents are: -  
Section 21(1) which states that

- The purification of waste water shall form an integral part of water usage and
- that purified effluents shall comply with the General Standard Quality restrictions as laid out in Government Gazette R553 of 5 April 1962 and
- Section 21(2) which further stipulate that this purified effluent be returned as close as possible to the point of abstraction of the original water.

Where a local authority has undertaken the duty of disposing of all effluents from an industrial process the provisions of Section 21(1) and 21(2) apply to the local authority and not the producer of the effluents. If there is difficulty in complying with these provisions then the applicant may apply for an exemption from the conditions in terms of Section 21(5) and 22(2) of the Water Act. The Permanent Secretary after consultation with the Minister may grant the issuance of a Waste Water Discharge Permit under Sections 21(5) and 22(2) subject to such conditions as he may deem fit to impose.

After independence, the Government of the Republic of Namibia decided that for the interim the existing guidelines will continue to be valid and to remain in use until a proper study has been conducted and new standards have been formulated (Article 140 of Act 1 of 1990).

## 2. GUIDELINES FOR THE EVALUATION OF DRINKING-WATER QUALITY FOR HUMAN CONSUMPTION WITH REGARD TO CHEMICAL, PHYSICAL AND BACTERIOLOGICAL QUALITY

Water supplied for human consumption must comply with the officially approved guidelines for drinking-water quality. For practical reasons the approved guidelines have been divided into three basic groups of determinants, namely:

- Determinants with aesthetic / physical implications: TABLE 1.
- Inorganic determinants: TABLE 2.
- Bacteriological determinants: TABLE 3.

### 2.1 CLASSIFICATION OF WATER QUALITY

The concentration of and limits for the aesthetic, physical and inorganic determinants define the group into which water will be classified. See TABLES 1 and 2 for these limits. The water quality has been grouped into 4 quality classes:

- 2.1 Group A: Water with an excellent quality
- 2.2 Group B: Water with acceptable quality
- 2.3 Group C: Water with low health risk
- Group D: Water with a high health risk, or water unsuitable for human consumption.

Water should ideally be of excellent quality (Group A) or acceptable quality (Group B), however in practice many of the determinants may fall outside the limits for these groups.

If water is classified as having a low health risk (Group C), attention should be given to this problem, although the situation is often not critical as yet.

If water is classified as having a higher health risk (Group D), urgent and immediate attention should be given to this matter.

Since the limits are defined on the basis of average lifelong consumption, short-term exposure to determinants exceeding their limits is not necessarily critical, but in the case of toxic substances, such as cyanide, remedial measures should immediately be taken.

The overall quality group, into which water is classified, is determined by the determinant that complies the least with the guidelines for the quality of drinking water.

TABLE 1: DETERMINANTS WITH AESTHETIC / PHYSICAL IMPLICATIONS

DETERMINANTS	UNITS*	LIMITS FOR GROUPS			
		A	B	C	D**
Colour	mg/l Pt***	20			
Conductivity	mS/m at 25 °C	150	300	400	400
Total hardness	mg/l CaCO <sub>3</sub>	300	650	1300	1300
Turbidity	N.T.U****	1	5	10	10
Chloride	mg/l Cl	250	600	1200	1200
Chlorine (free)	mg/l Cl	0,1- 5,0	0,1 – 5,0	0,1 – 5,0	5,0
Fluoride	mg/l F	1,5	2,0	3,0	3,0
Sulphate	mg/l SO <sub>4</sub>	200	600	1200	1200
Copper	µg/l Cu	500	1000	2000	2000
Nitrate	mg/l N	10	20	40	40
Hydrogen Sulphide	µg/l H <sub>2</sub> S	100	300	600	600
Iron	µg/l Fe	100	1000	2000	2000
Manganese	µg/l Mn	50	1000	2000	2000
Zink	mg/l Zn	1	5	10	10
pH****	pH-unit	6,0 – 9,0	5,5 – 9,5	4,0 – 11,0	4,0 – 11,0

- \* In this and all following tables "l" (lower case L in ARIAL) is used to denote dm<sup>3</sup> or litre  
 2.2 All values greater than the figure indicated.  
 2.2 Pt = Platinum Units  
 3.0 Nephelometric Turbidity Units  
 \*\*\*\*\* The pH limits of each group exclude the limits of the previous group

TABLE 2: INORGANIC DETERMINANTS

DETERMINANTS	UNITS	LIMITS FOR GROUPS			
		A	B	C	D*
Aluminium	µg/l Al	150	500	1000	1000
Ammonia	mg/l N	1	2	4	4
Antimonia	µg/l Sb	50	100	200	200
Arsenic	µg/l As	100	300	600	600
Barium	µg/l Ba	500	1000	2000	2000
Beryllium	µg/l Be	2	5	10	10
Bismuth	µg/l Bi	250	500	1000	1000
Boron	µg/l B	500	2000	4000	4000
Bromine	µg/l Br	1000	3000	6000	6000
Cadmium	µg/l Cd	10	20	40	40
Calcium	mg/l Ca	150	200	400	400
Calcium	mg/l CaCO <sub>3</sub>	375	500	1000	1000
Cerium	µg/l Ce	1000	2000	4000	4000
Chromium	µg/l Cr	100	200	400	400
Cobalt	µg/l Co	250	500	1000	1000
Cyanide (free)	µg/l CN	200	300	600	600
Gold	µg/l Au	2	5	10	10
Iodine	µg/l I	500	1000	2000	2000
Lead	µg/l Pb	50	100	200	200
Lithium	µg/l Li	2500	5000	10000	10000
Magnesium	mg/l Mg	70	100	200	200
Magnesium	mg/l CaCO <sub>3</sub>	290	420	840	840
Mercury	µg/l Hg	5	10	20	20
Molybdenum	µg/l Mo	50	100	200	200
Nickel	µg/l Ni	250	500	1000	1000
Phosphate	mg/l P	1	See note below	See note below	See note below
Potassium	mg/l K	200	400	800	800
Selenium	µg/l Se	20	50	100	100
Silver	µg/l Ag	20	50	100	100
Sodium	mg/l Na	100	400	800	800
Tellurium	µg/l Te	2	5	10	10
Thallium	µg/l Tl	5	10	20	20
Tin	µg/l Sn	100	200	400	400
Titanium	µg/l Ti	100	500	1000	1000
Tungsten	µg/l W	100	500	1000	1000
Uranium	µg/l U	1000	4000	8000	8000
Vanadium	µg/l V	250	500	1000	1000

3.2 All values greater than the figure indicated.

Note FOR Table 2 on phosphate: Phosphates are not toxic and essential for all life-forms. Natural water will, however, seldom contain phosphate; it is generally seen as an indicator of pollution and is usually accompanied by other pollutants. Wherever drinking water is combined with or consists wholly of reclaimed or recycled water, it may be expected to contain phosphate. The general guideline for a concentration level to be aimed at is 1 mg/l as P. But in many cases this may be difficult to achieve technically. For this reason the Department will allow a phosphate concentration level of up to 5 mg/l as P in water intended for human consumption. Please refer also to the "Note on Phosphate" under Section 3: General Standards for Waste/Effluent.

## 2.2 BACTERIOLOGICAL DETERMINANTS

The bacteriological quality of drinking water is also divided into four groups, namely:

- Group A: Water which is bacteriological very safe;
- Group B: Water which is bacteriological still suitable for human consumption;
- Group C: Water which is bacteriological risk for human consumption, which requires immediate action for rectification;
- Group D: Water, which is bacteriological unsuitable for human consumption.

TABLE 3: BACTERIOLOGICAL DETERMINANTS

DETERMINANTS	LIMITS FOR GROUPS			
	A**	B**	C	D*
Standard plate counts per 1 ml	100	1000	10000	10000
Total coliform counts per 100 ml	0	10	100	100
Faecal coliform counts per 100 ml	0	5	50	50
E. coli counts per 100 ml	0	0	10	10

\* All values greater than the figure indicated.  
 \*\* In 95% of the samples.

NB If the guidelines in group A are exceeded, a follow-up sample should be analysed as soon as possible.

## 2.3 FREQUENCY FOR BACTERIOLOGICAL ANALYSIS OF DRINKING-WATER SUPPLIES

The recommended frequency for bacteriological analysis of drinking water is given in Table 4.

TABLE 4: FREQUENCY FOR BACTERIOLOGICAL ANALYSIS

POPULATION SERVED	MINIMUM FREQUENCY OF SAMPLING
More than 100 000	Twice a week
50 000 – 100 000	Once a week
10 000 – 50 000	Once a month
Minimum analysis	Once every three months

### 3 GENERAL STANDARDS FOR WASTE / EFFLUENT WATER DISCHARGE INTO THE ENVIRONMENT

All applications in terms of Section 21(5) and 22(2), for compliance with the requirements of Section 21(1) and 21(2) of the Water Act (Act 54 of 1956) that purified water shall comply with the General Standard as laid out in Government Gazette Regulation R553 of 5 April 1962.

TABLE 5 GENERAL STANDARDS FOR ARTICLE 21 PERMITS (EFFLUENTS)

DETERMINANTS	MAXIMUM ALLOWABLE LEVELS
Arsenic	0,5 mg/l as As
Biological Oxygen Demand (BOD)	no value given
Boron	1,0 mg/l as B
Chemical Oxygen Demand (COD)	75 mg / l as O
Chlorine, residual	0,1 mg/l as Cl <sub>2</sub>
Chromium, hexavalent	50 Ng/l as Cr(VI)
Chromium, total	500 Ng/l as Cr
Copper	1,0 mg/l as Cu
Cyanide	500 Ng/l as CN
Oxygen, Dissolved (DO)	at least 75% saturation**
Detergents, Surfactants, Tensides	0,5 mg/l as MBAS – See also Note 2
Fats, Oil & Grease (FOG)	2,5 mg/l (Igravimetric method)
Fluoride	1,0 mg/l as F
Free & Saline Ammonia	10 mg/l as N
Lead	1,0 mg/l as Pb
Oxygen, Absorbed (OA)	10 mg / l as O*
pH	5,5 – 9,5
Phenolic Compounds	100 Ng/l as phenol
Phosphate	1,0 mg/l as P - See also Note 1
Sodium	not more than 90 mg/l Na more than influent
Sulphide	1,0 mg/l as S
Temperature	35°C
Total Dissolved Solids (TDS)	not more than 500 mg /l more than influent
Total Suspended Solids (TSS)	25 mg/l
Typical faecal Coli.	no typical coli should be counted per 100 ml
Zinc	5,0 mg/l as Zn

\* Also known as Permanganate Value (or PV).

\*\* In Windhoek the saturation level is at approx. 9 mg/l O<sub>2</sub>.

Note (1) on phosphate: Phosphates are not toxic and essential for all life forms. Natural water will seldom contain phosphate; it is generally seen as an indicator of pollution and is usually accompanied by other pollutants. Wherever drinking water is combined with or consists wholly of reclaimed or recycled water, it may be expected to contain phosphate. There is no general guideline for phosphate contained in the Regulation 553. But generally it is assumed that eutrophication or algal bloom in dams is promoted by nutrient concentrations as low as 0,01 mg/l as P; generally a phosphate concentration limit for dams of 0,1 mg/l is recommended. All water that is consumed and subsequently discharged, will eventually end up in rivers, dams or

groundwater – that is why for potable water, a concentration level of 1 mg/l as P is aimed at.

But, again, in many cases of waste and effluent treatment, this may be difficult to achieve technically, or the required waste and effluent treatment infrastructure is not available; as the required infrastructure is sophisticated and expensive. The current situation calls for a compromise and for this reason, this Department will judge each application individually on its merits and allow, in certain cases, a phosphate concentration level of up to 15 mg/l as P in any effluent or waste stream to be discharged into the environment. This regulation is subject to be reviewed every two years, calculated from the date of approval of this document.

Note (2) on detergents, surfactants and ten sides: The MBAS (or methylene blue active substances) – test does not encompass all surface active compounds currently, commercially available. The limit given is therefore only a guideline. Many of the cleaning agents are toxic to biological life-forms in rivers and dams.

It should be taken into consideration that some commercial products interfere with the effective removal of oil, fat and grease by grease and fat traps, by breaking up such long-chain molecules into shorter ones. These cleaning agents thus effectively allow such components to pass through the traps and land into sections of a treatment plant further down the line and interfere with the process there.

Many cleaning agents contain very powerful disinfectants, and/or biocides. Such substances may interact with biological treatment processes. They may reduce the effectiveness of such treatment or 'kill' it completely, if they land in septic tanks, biofilters or even activate-sludge plants. Their activity may be attenuated by dilution.

#### 4. AUTHORIZATION

Herewith, the Guidelines for the Evaluation of Drinking Water for Human Consumption with regard to Chemical, Physical and Bacteriological Quality, as well as the General Standards for Article 21\* Permits, amended for detergents, surfactants, ten sides, as well as phosphates, are confirmed and remain in force until further notice.

Issued under my hand with the authority vested in my office, within the Ministry for Agriculture, Water and Rural Development,

PERMANENT SECRETARY  
Dr V Shivute

WINDHOEK,

DATE STAMP



**ANNEXURE B: COVID-19 RISK ASSESSMENT FORM (AS AMENDED PERIODICALLY BASED ON DEVELOPING MEDICAL INFORMATION)**  
**Return to Work Medical Screening**

<b>Surname:</b>	<b>First Name:</b>	<b>Company Number</b>
<b>Date Of Birth:</b>	<b>Occupation:</b>	<b>Department:</b>
<b>Date Employed:</b>	<b>Date Discharged:</b>	<b>Length Of Service:</b>

1.

<b>Vital Data</b>	
<b>Blood Pressure</b>	<b>mmHg</b>
<b>Pulse</b>	<b>Bpm</b>
<b>Temperature</b>	<b>°C</b>
<b>HGT (for known diabetics)</b>	<b>mmol/L</b>
<b>Have you ever had a serious occupational accident or an Occupational disease?</b>	<b>Yes No</b>
<b>Describe</b>	
<b>Chronic Disease</b>	<b>Yes No</b>
<b>Hypertension</b>	

<b>4.</b>	<b>Diabetes</b>		
	<b>Epilepsy</b>		
	<b>Asthma</b>		
	<b>TB</b>		
	<b>Psycho-social problems **</b>		
<b>If yes and symptomatic, or any vital signs out of normal limits, refer to the medical centre</b>			
<b>** If yes, refer to the medical centre for referral for EAP</b>			
<b>5.</b>	<b>Do you take <u>any</u> medication (List Below)</b>	<b>Yes</b>	<b>No</b>

		Yes	No
<b>Symptom Check</b>			
<b>Fever</b>			
<b>Cough</b>			
<b>6. Sore Throat</b>			
<b>Shortness of breath</b>			
<b>Any contact with person diagnosed with COVID—19</b>			
<b>If any symptoms are present refer the employee to the isolation area</b>			
<b>Status</b> (Tick appropriate box)			
<b>7. Fit to work</b>			
<b>Refer to medical centre</b>			
<b>Refer to isolation area</b>			

**I hereby declare that all the information furnished above is, to the best of my knowledge, true and correct and that no information has been omitted or withheld.**

**Signature of employee:** \_\_\_\_\_

**Assessed by:** \_\_\_\_\_



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

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05 October 2017

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

The Managing Member  
Luxury Investments cc  
P. O Box 86  
Swakopmund

Dear Sir/ Madam

**SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE PROPOSED MINING CLAIMS 69776 - 69781 SITUATED ON FARM OTWANI, OPUWO DISTRICT, KUNENE REGION**

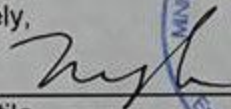
The Environmental Scoping and Environmental Management Plan submitted are sufficient as these has made an adequate provisions of the environmental management concerning the proposed activities. From this perspective regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored from time to time.

This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project.

On the basis of the above, this letter serves as an environmental clearance certificate for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with Luxury Investments cc.

This environmental clearance is valid for a period of 3 (three) years, from the date of issue (08 March 2016) unless withdrawn by this office.

Yours sincerely,

  
Teofilus Nghitila  
Office of the  
ENVIRONMENTAL COMMISSIONER



**"Stop the poaching of our rhinos"**

All official correspondence must be addressed to the Permanent Secretary



**HEEC**  
Sustainable development solutions for life

**HEALTHY  
EARTH  
ENVIRONMENTAL  
CONSULTANTS CC**

	<b>MONITORING AND EVALUATION REPORT FOR THE MINING OF BASE AND RARE METAL (COPPER) ON MINING CLAIMS NO; 69776, 69777, 69778, 69779, 69781 &amp; 69781 AT FARM OTWANI, OPUWO RURAL CONSTITUENCY, KUNENE REGION, NAMIBIA</b>		
<b>HEEC Reference</b>	HEEC027-2020		
<b>Proponent</b>	Luxury Investments One Hundred And Ninety Two Pty P.O Box 86 Swakopmund, Namibia  Contact Person: Mr. Stephanus Visser Contact Number: +264 816721587 Email: <a href="mailto:stephanus@premier.com.na">stephanus@premier.com.na</a>		
<b>Report Date</b>	October 2020		
<b>Author</b>	David S. Aiyambo	<b>Signature</b>	<i>D. Aiyambo</i>
<b>Status</b>	MONITORING AND EVALUATION REPORT (BI ANNUAL REPORTS)	<b>Reporting Period</b>	March 2016 – March 2020



***Our consultancy Portfolio / Specialisation is composed of:***

- STRATEGIC ENVIRONMENTAL IMPACT ASSESSMENTS
- ENVIRONMENTAL IMPACT ASSESSMENTS
- ENVIRONMENTAL AUDITING AND MONITORING
- WATER QUALITY MONITORING AND MANAGEMENT
- WATER PROSPECTING
- WASTE MANAGEMENT
- ENVIRONMENTAL POLICY REVIEWS
- ENVIRONMENTAL AWARENESS AND TRAINING
- ENVIRONMENTAL MANAGEMENT SYSTEM (ISO14001) IMPLEMENTATION
- ENVIRONMENTAL CONSULTATION
- ECOSYSTEM EVALUATION
- ENVIRONMENTAL SAFETY, HEALTH AND MANAGEMENT
- FLORA IDENTIFICATION
- GEOGRAPHICAL INFORMATION SYSTEM (GIS) AND REMOTE SENSING
- BIOHAZARD MONITORING (AIR AND RADIATION POLLUTION MONITORING)
- GREEN CLAIMS AND CARBON TAX
- LANDSCAPING AND GREEN HOUSE IRRIGATION SUPPLIES AND MAINTENANCE
- MINING
- BUSH ENCROACHMENT CONTROL
- DATA COLLECTION AND ANALYSIS
- AGRICULTURE EXTENSION SERVICES

## 1. INTRODUCTION

Luxury Investments One Hundred And Ninety Two Pty hereinafter referred to as the proponent, is carrying out mining activities for base and rare metals (copper) on mining claims; 69776, 69777, 69778, 69779, 69780 & 69781, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region. Otwani village is situated about 80 Km south of Opuwo when using the C43 road off the D3705 road from Opuwo to Sesfontein and the actual mining is taking place about 7.8 km west of Otwani village on mining claim 69777. The base and rare metals (copper) under-goes further processing onsite by means of grinding the ore to produce a powder which is exported via Walvis Bay port to international market mainly Europe for further processing. The proponent has existing markets and long-term binding contracts to supply the ore that they should honour and any delays will result in serious financial and job losses.

The proponent has valued the safeguarding of the environment and has adopted environmental resilience in their daily operations. In compliance with the legal requirements Luxury Investments One Hundred And Ninety Two Pty was issued with an Environmental Certificate (ECC), in March 2016 in for their operation which had expired. The ECC had specified conditions that have to be adhered to during the operational phase of the mine; in particular it calls for unremitting monitoring and evaluations on environmental performance to be carried out as well as the setting and monitoring of the targets for improvement. It is against this background that Healthy Earth Environmental Consultants (HEEC) has been appointed by Luxury Investments One Hundred And Ninety Two Pty to carry out the monitoring and evaluation process for mining of base and rare metals (copper) on mining claims; 69776, 69777, 69778, 69779, 69780 & 69781, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region.

The bi-annual reports (after a site visit once every 6 months) will be submitted to the Office of the Environmental Commissioner to necessitate the renewal of the ECC. In preparation of the monitoring and evaluation report, HEEC conducts bi-annual site visits and inspection at the mine at Farm Otwani, Otwani Village. The site inspection entailed three integral components; ground truthing which includes visual inspection and ground truthing throughout the mining area, consultation with the Mine Manager and verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The inspection and reporting to the management of the mine, the mitigation measures and the intensity of compliance has been given three (3) ranks namely; rank one (1) ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement and rank three (3) high level compliance and it should be maintained or even ameliorated.



## 2. MANAGEMENT ACTIONS

The Environmental Management Plan (EMP) tailor-made for mining activities for base and rare metals (copper) on mining claims; 69776, 69777, 69778, 69779, 69780 & 69781, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, has been formulated with the aim of identifying the management actions significant to mitigate the likely negative impacts associated with this project. Where impact cannot be mitigated, measures have been put in place to moderate the significance of such impacts. The reflection made during the site inspection over the past 36 months period has been outlined in the following section including site photo. A synopsis of the assessments and reflection will be outlined for the impacts and mitigation measures derived from the EMP.

### 2.1 Fauna and Flora

This impact has been ranked two (2) and indicating a medium level of compliance and requires improvement. During the initial six month of the project, Luxury Investments One Hundred And Ninety Two Pty has to a large extent cleared the area with a good deposit of copper without restoration although they tried to avoid certain plant occurring within the mining claim areas. A large section of the intrusion with a good grade of copper has been excavated and only few individual plants left on the bank of the pit.

### 2.2 Surface and Ground water

This impact has been ranked three (3) indicating high level compliance and it should be maintained or even ameliorated. Luxury Investments One Hundred And Ninety Two Pty has been ensuring that their mining equipment such as bull-dozers, front-end loaders and flatbed trucks are regularly serviced and there are no records of oil leakage which will eventually seep into the ground to contaminate the underground water. There were no signs of surface water bodies contaminated in the mining claim area, therefore this impact has been ranked three (3). The company has also complied with the water abstraction permit conditions and implemented water conservation measures at the site.

### 2.3 Visual and Sense of Place

Most of the mitigation measures for these impacts have been ranked two (2) indicating a medium level compliance and require improvement. The intrusion with a good grade of copper has been excavated, without taking the camouflage approaches into consideration and there are no back-filling at some sections of pit where excavation has taken place. The pit is steep and is likely to cause injuries to both human and wild animals. The aesthetic value of the area has been lost and a certain level of rehabilitation concurrent with mining is required.

## 2.4 Archeology and Heritage

There are no known artifacts or heritage significance found in the mining claim areas and the site manager is not aware of any artifacts or areas of heritage significance, however any discovery or finding will be reported to the relevant authority which is the National Heritage Council of Namibia (NHC), hence this mitigation measures have been ranked three (3) indicating high level compliance and it should be maintained or even ameliorated.

## 2.5 Healthy, Safety and Security

All the mitigation measures have been ranked three (3) indicating high level compliance and it should be maintained or even ameliorated. Luxury Investments One Hundred And Ninety Two Pty render occupational health, safety and environment training to their employees in their respective fields and regular site meetings held onsite put emphasis on safety and environment. All employees are provided with the necessary Personal Protective Equipment's (PPE). Upon entering the mining area there is permanent access control point and only authorized people are allowed onsite and it is mandatory to wear the masks and under-go for temperature checks. The company is adhering to all state of emergency regulations and all COVID19 protocols, such as social distancing, washing of hand regularly and sanitizing are being practiced. In order to maintain social distancing, the company has rotational shift system in place.

## 2.6 Social

Local have the privilege of employment opportunity which improve the livelihoods of many people at Otwani village. Luxury Investments One Hundred And Ninety Two Pty has supported the community through corporate social responsibility by constructing water infrastructures at the village and ensure that there is constant water supply for people and livestock. The company has been instrumental in assisting the community during bereavement and there have been numerous assistances rendered towards funerals. Plans are underway to commence with supporting the community trust on condition that the community open a trust account with any credible financial institution. This mitigation measure is ranked; three (3) high level compliance and it should be maintained or even ameliorated.

## 2.7 Economic

The mine is among the few well performing economic activities existing at Otwani Village. The mine has employed 44 people on fixed term contracts and most of the outsourced contracts are given to the local SMEs which provide additional employment opportunity which improve the livelihoods of many people at the village. The mine also purchases the copper from local small-scale miners. This mitigation measure is ranked; three (3) high level compliance

and it should be maintained or even ameliorated.

## 2.8 Traffic

The mine has established an access road branching from the C43 road from Opuwo to Sesfontein and any creation of unintended pathways has been avoided. Vehicles are kept in good condition, with dedicated and qualified mechanics leading the technical team responsible for maintenance. The movement of the vehicle is kept to the optimum standard. Although the road is graded regularly there is a need to commence with watering the road during grading in order to suppress the dust. Furthermore, parking bays should be clearly marked and road signs should be erected along the road leading to the mine from the C43 road and within the mining area. The mitigation measures for this impact have been ranked two (2) indicating a medium level compliance and require of improvement.

## 2.9 Noise

Luxury Investments One Hundred And Ninety Two Pty business operation is from 07h00 am to 17h00 pm. Blasting is only carried out when there are bedrocks or overburden on the pit and the community are always notified well in advance. All employees have access to PPE where feasible. These mitigation measures have been ranked; three (3) high level compliance and it should be maintained or even ameliorated.

## 2.10 Air Quality

Air quality monitoring is among the few items that requires some level of urgent attention at the mine claim sites. The mitigation measure for this impact is ranked one (1) ranked as non-compliance and require certain critical intervention. Certain mitigation measure of concern has been identified; this includes regular airborne dust sampling.

## 2.11 Solid Waste

This impact is ranked two (2) indicating a medium level of compliance and requires improvement. Luxury Investments One Hundred And Ninety Two Pty has few waste bins onsite. Additional waste bins should be made available onsite with colour codes for distinct waste fractions. The RRR (Reduce, Reuse and Recycle) should be adopted as an approach for waste management. In-house waste management training should be conducted to ensure that the employees have a better understanding of different waste fractions and the importance of recycling highlighted. Furthermore, the management should use visual aids; for instance, the use of images of waste category allowed in each bin.

## 2.12 Hazardous substances

The hazardous substance impact has been ranked three; (3) high level

compliance and it should be maintained or even ameliorated. Appropriate storage facility is provided for these substances.

### 2.13 Land use alteration and degradation

The mitigation measures for this impact are ranked two (2) indicating a medium level of compliance and require improvement. The mitigation measures for this impact entails issues such as updating the Environmental Management Plan (EMP) as new impacts emerge, this will ensure continuous management and compliance to set mitigation measures and perform site rehabilitation on a continuous basis.

### 2.14 Existing service infrastructure

Luxury Investments One Hundred And Ninety Two Pty is currently using a diesel powered machine to supply power to the facility at the mine. Currently the energy requirement for household is minimal due to the fact that only the site manager stays onsite and the rest of the staff member are from the village. In terms of cooking the gas stove is used for the kitchen and the gas bottle is enclosed in the cages outside the kitchen for safety reasons; such as in the event of explosion or fire. Luxury Investments One Hundred And Ninety Two Pty has planned to set up a 5 MW solar power to supply electricity to the mine and feed the national grid which supplies electricity to the school, clinic and the village, this will reduce energy cost in the area and reduces the impact of climate change. This impact is ranked two (2) indicating a medium level of compliance and requires improvement.

### 2.15 Environmental Management Plan (EMP) Training

Luxury Investments One Hundred And Ninety Two Pty has priorities safety, health and environment in their daily operation and employees are acquainted with the relevant safety, health and environmental matters. Environmental training has been given the highest priority and is one of the highlighted topics in the agenda of the site meetings that are habitually held. The company has a service level agreement with Healthy Environmental Consultants cc (HEEC) to carry out all environmental reporting's and advisory roles.

### 2.16 Monitoring

In accordance with the mitigation measures, HEEC will carry out the monitoring and evaluation services. The site inspections are carried out on a monthly basis, and bi-annual reports are to be compiled and submitted to the Office of the Environmental Commissioner, hence this report serving as the initial bi-annual report compilation.

### **3. ANNEXURE A**

Inspection reports

March 2016- August 2016 (6 months)

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in March 2016.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 1<sup>st</sup> site inspection was carried out in March 2016 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

<b>OPERATIONAL PHASE IMPACTS</b>			
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>• Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>• Protected plants occurring in the mining area should be marked and avoided at all cost.</li> <li>• Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> <li>• Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank two (2)	A restoration program should be commissioned. Alien plant task force is recommended.
Surface and Ground water	<ul style="list-style-type: none"> <li>• Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> <li>• Contaminated runoff from the various operational activities such as fuel, oil, grease and so forth should be prevented from entering</li> </ul>	Rank three (3)	

	any surface or ground water bodies and where these happened, immediate remedial actions should be taken.			
	<ul style="list-style-type: none"> <li>Washing of equipment is not permitted onsite.</li> <li>Avoid the spillage of fuel.</li> <li>Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	Rank three (3)	Rank three (3)	All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.
	<ul style="list-style-type: none"> <li>The mine pit should blend in with the natural surrounding environment.</li> <li>The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	Rank two (2)	Rank two (2)	Stockpiles should be used to maintain the blending of the surrounding natural environment. These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.
Visual and Sense of Place	<ul style="list-style-type: none"> <li>The proponent or proponent representative should report any discovery or finding of any archaeological or heritage aspects to the relevant authorities such as</li> </ul>	Rank three (3)	Rank three (3)	



	the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and safety procedures and emergency measures.</li> </ul>	Rank three (3)	

	<ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
<b>Social</b>	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
		Rank three (3)	
<b>Economic</b>	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank two (2)	
		Rank two (2)	
<b>Traffic</b>	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have good line of sight.</li> <li>Vehicles used at the mine must be</li> </ul>	Rank three (3)	
		Rank one (1)	
		Rank three	

	road worthy and properly serviced at all time.	(3)	
	<ul style="list-style-type: none"> <li>Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Ensure that emissions from any activity within the mining area is</li> </ul>		It is recommended that regular dust
<b>Air Quality</b>			

	<p>within the World Health Organisation (WHO) Air Quality Guidelines.</p> <ul style="list-style-type: none"> <li>• Carry out regular airborne dust sampling.</li> <li>• Ensure elusive dust does not exceed applicable limits.</li> <li>• Wet loose dust areas.</li> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> <li>• Restrict speed of vehicles movement at the onsite.</li> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> <li>• Avoid over-loading of vehicles.</li> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> </ul>	<p>sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.</p>
		Rank one (1)
		Rank one (1)
		Rank one (1)
		Rank three (3)
		Rank three (3)
		Rank three (3)
		Rank one (1)
		Rank one (1)
Solid Waste	<ul style="list-style-type: none"> <li>• Implement an Integrated Solid Waste Management System onsite.</li> </ul>	Rank one (1)

	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> <li>Avoid burning waste</li> <li>Place distinct bins to separate and collect various types of waste.</li> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> <li>Substantial number of waste bins must be placed around the mine.</li> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	<p>Rank one (1)</p> <p>Rank three (3)</p> <p>Rank one (1)</p> <p>Rank two (2)</p> <p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank three (3)</p>	
Hazardous substances	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total volume of a given substance stored on site.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p>	

Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)		
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)		
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)		
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)		
	<ul style="list-style-type: none"> <li>Re-use of treated waste water should be considered wherever</li> </ul>	Rank one (1)		

	possible to reduce the consumption of portable water.		
	<ul style="list-style-type: none"> <li>Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Monitoring	<ul style="list-style-type: none"> <li>An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	

September 2016- February 2017

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in November 2016.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 2<sup>nd</sup> site inspection was carried out in November 2016 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo



<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

**OPERATIONAL PHASE IMPACTS**

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
	<ul style="list-style-type: none"> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank three (3)	Alien plant task force is recommended.
Surface and Ground water	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	
Archaeology and			

Heritage	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	safety procedures and emergency measures.		
	<ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank three (3)	
Economic		Rank three (3)	
		Rank two (2)	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have</li> </ul>	Rank three (3)	
		Rank one (1)	

Traffic	good line of sight.		
	<ul style="list-style-type: none"> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
Noise	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	

Air Quality	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> <li>• Carry out regular airborne dust sampling.</li> <li>• Ensure elusive dust does not exceed applicable limits.</li> <li>• Wet loose dust areas.</li> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> <li>• Restrict speed of vehicles movement at the onsite.</li> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> <li>• Avoid over-loading of vehicles.</li> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> <li>• Implement an Integrated Solid</li> </ul>	Rank one (1)  Rank one (1) Rank one (1) Rank one (1)  Rank three (3) Rank three (3)  Rank three (3) Rank one (1)	It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.
		Rank one (1)	
		Rank one (1)	

Solid Waste	Waste Management System onsite.	Rank
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)
Hazardous substances	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	



	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	
Monitoring		Rank three (3)	

March 2017- August 2017

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in May 2017.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 3<sup>rd</sup> site inspection was carried out in May 2017 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

### OPERATIONAL PHASE IMPACTS

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
	<ul style="list-style-type: none"> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank three (3)	Alien plant task force is recommended.
Surface and Ground water	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
<p>Visual and Sense of Place</p>	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	<p>The National Heritage Council shall be contracted to carry out the archeological assessment in the project area.</p>
<p>Archaeology and Heritage</p>			

	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	<p>safety procedures and emergency measures.</p> <ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p>	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	<p>Rank three (3)</p>	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank two (2)</p>	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have</li> </ul>	<p>Rank three (3)</p> <p>Rank one (1)</p>	

Traffic	good line of sight.		
	<ul style="list-style-type: none"> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
Noise	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	

Air Quality	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> <li>• Carry out regular airborne dust sampling.</li> <li>• Ensure elusive dust does not exceed applicable limits.</li> <li>• Wet loose dust areas.</li> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> <li>• Restrict speed of vehicles movement at the onsite.</li> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> <li>• Avoid over-loading of vehicles.</li> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> <li>• Implement an Integrated Solid</li> </ul>	Rank one (1)	It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.
		Rank one (1)	
		Rank one (1)	
		Rank one (1)	
		Rank three (3)	
		Rank three (3)	
		Rank three (3)	
		Rank one (1)	
		Rank one (1)	



Solid Waste	Waste Management System onsite.	Rank
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)
Hazardous substances	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	

	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	
Monitoring		Rank three (3)	

September 2017 – February 2018

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in January 2018.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 4<sup>th</sup> site inspection was carried out in January 2018 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

**OPERATIONAL PHASE IMPACTS**

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
	<ul style="list-style-type: none"> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank three (3)	Alien plant task force is recommended.
Surface and Ground	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Contaminated runoff from the</li> </ul>	Rank three	

water	<p>various operational activities such as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	(3)		
			Rank three (3)	All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.
			Rank three (3)	
			Rank three (3)	
			Rank three (3)	
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	Rank two (2)	Rank two (2)	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any</li> </ul>	Rank three (3)	Rank three (3)	The National Heritage Council shall be contracted to carry out the archeological

	discovery or finding of any archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		assessment in the project area.
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must</li> </ul>	Rank three	

	be informed of the health and safety procedures and emergency measures.	(3)	
	<ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
		Rank three (3)	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank three (3)	
		Rank three (3)	
		Rank two (2)	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> </ul>	Rank three (3)	



Traffic	<ul style="list-style-type: none"> <li>• Ensure that road junctions have good line of sight.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
Noise	<ul style="list-style-type: none"> <li>• Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	

Air Quality	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> </ul>	Rank one (1)	It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.
	<ul style="list-style-type: none"> <li>Carry out regular airborne dust sampling.</li> </ul>		
	<ul style="list-style-type: none"> <li>Ensure elusive dust does not exceed applicable limits.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Wet loose dust areas.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Restrict speed of vehicles movement at the onsite.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Avoid over-loading of vehicles.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> </ul>	Rank one (1)	

Solid Waste	<ul style="list-style-type: none"> <li>Implement an Integrated Solid Waste Management System onsite.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)	
Hazardous	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Storage area for all substances</li> </ul>	Rank three	

substances	should be properly secure and in position to hold 120% of the total volume of a given substance stored on site.	(3)	
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line</li> </ul>	Rank one (1)	

	with applicable local authority by-laws.		
	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
		Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
		Rank three (3)	
Monitoring	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of</li> </ul>	Rank three (3)	
		Rank three (3)	
		Rank three (3)	

	Environment, Forestry and Tourism.		
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March 2018 – August 2018

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in July 2018.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 5<sup>th</sup> site inspection was carried out in July 2018 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

<b>OPERATIONAL PHASE IMPACTS</b>			
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
	<ul style="list-style-type: none"> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank three (3)	Alien plant task force is recommended.
Surface and Ground	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Contaminated runoff from the</li> </ul>	Rank three	

water	various operational activities such as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.	(3)	
	<ul style="list-style-type: none"> <li>Washing of equipment is not permitted onsite.</li> </ul>	Rank three (3)	All cleaning of equipment should be done at the car wash with proper storm water system at Otswana.
	<ul style="list-style-type: none"> <li>Avoid the spillage of fuel.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Constantly monitor fuel tanks and supply lines to detect leakages.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	Rank three (3)	
Visual and Sense of Place	<ul style="list-style-type: none"> <li>The mine pit should blend in with the natural surrounding environment.</li> </ul>	Rank two (2)	Stockpiles should be used to maintain the blending of the surrounding natural environment.
	<ul style="list-style-type: none"> <li>The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	Rank two (2)	These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.
Archaeology and Heritage	<ul style="list-style-type: none"> <li>The proponent or proponent representative should report any</li> </ul>	Rank three (3)	



	discovery or finding of any archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must</li> </ul>	Rank three	

	be informed of the health and safety procedures and emergency measures.	(3)	
	<ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank three (3)	
		Rank two (2)	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> </ul>	Rank three (3)	

Traffic	<ul style="list-style-type: none"> <li>• Ensure that road junctions have good line of sight.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
Noise	<ul style="list-style-type: none"> <li>• Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	

<p style="text-align: center;">Air Quality</p>	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> </ul>	Rank one (1)	It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.
	<ul style="list-style-type: none"> <li>Carry out regular airborne dust sampling.</li> </ul>		
	<ul style="list-style-type: none"> <li>Ensure elusive dust does not exceed applicable limits.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Wet loose dust areas.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Restrict speed of vehicles movement at the onsite.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Avoid over-loading of vehicles.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> </ul>	Rank one (1)	

<p><b>Solid Waste</b></p> <ul style="list-style-type: none"> <li>• Implement an Integrated Solid Waste Management System onsite.</li> <li>• Place priority on waste prevention, reduction and waste recycling.</li> <li>• Avoid burning waste</li> <li>• Place distinct bins to separate and collect various types of waste.</li> <li>• Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> <li>• Substantial number of waste bins must be placed around the mine.</li> <li>• Enough skip containers should be placed at the designated area for heavy waste.</li> <li>• In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank one (1)	Rank one (1)	Rank three (3)
<p><b>Hazardous substances</b></p> <ul style="list-style-type: none"> <li>• All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> <li>• Storage area for all substances</li> </ul>	Rank three (3)	Rank three (3)	Rank three (3)

	should be properly secure and in position to hold 120% of the total volume of a given substance stored on site.	(3)	
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid hazardous excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line</li> </ul>	Rank one (1)	

	with applicable local authority by-laws.		
	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
		Rank three (3)	
		Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
		Rank three (3)	
Monitoring	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of</li> </ul>	Rank three (3)	
		Rank three (3)	

	Environment, Forestry and Tourism.		
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September 2018 – February 2019

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in February 2019.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 6<sup>th</sup> site inspection was carried out in February 2019 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,  




David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

<b>OPERATIONAL PHASE IMPACTS</b>			
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
		Rank two (2)	Alien plant task force is recommended.
		Rank three (3)	
		Rank three (3)	
Surface and Ground water	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> <li>Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	
		Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
Archaeology and Heritage	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	<p>Rank three (3)</p>	

	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	<p>safety procedures and emergency measures.</p> <ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	<p>Rank three (3)</p>	
		<p>Rank three (3)</p>	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	<p>Rank three (3)</p>	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank two (2)</p>	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> </ul>	<p>Rank three (3)</p>	
	<ul style="list-style-type: none"> <li>Ensure that road junctions have</li> </ul>	<p>Rank one (1)</p>	

Traffic	good line of sight.			
	<ul style="list-style-type: none"> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)		
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary.</li> </ul>	Rank two (2)		
	<ul style="list-style-type: none"> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)		
	Noise	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
		<ul style="list-style-type: none"> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
		<ul style="list-style-type: none"> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
<ul style="list-style-type: none"> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>		Rank three (3)		
<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>		Rank two (2)		

Air Quality	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> <li>• Carry out regular airborne dust sampling.</li> <li>• Ensure elusive dust does not exceed applicable limits.</li> <li>• Wet loose dust areas.</li> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> <li>• Restrict speed of vehicles movement at the onsite.</li> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> <li>• Avoid over-loading of vehicles.</li> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> <li>• Implement an Integrated Solid</li> </ul>	<p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank one (1)</p>	<p>It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.</p>
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Solid Waste	Waste Management System onsite.		
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)	
Hazardous substances	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)	

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	



	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	
Monitoring		Rank three (3)	

March 2019 – August 2019

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in July 2019.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 7<sup>th</sup> site inspection was carried out in July 2019 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

**OPERATIONAL PHASE IMPACTS**

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank two (2)	A restoration program should be commissioned. Alien plant task force is recommended.
Surface and Ground water	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> <li>Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	<p>The National Heritage Council shall be contracted to carry out the archeological assessment in the project area.</p>
Archaeology and Heritage			

	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	safety procedures and emergency measures.		
	<ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank three (3)	
		Rank three (3)	
		Rank two (2)	
	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have</li> </ul>	Rank three (3)	
		Rank one (1)	

Traffic	good line of sight.		
	<ul style="list-style-type: none"> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Transport the materials in the least quantity of trips as possible.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Comply to the speed limit of 40km/h.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Implement traffic control measures where necessary.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	Rank three (3)	
Noise	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	Rank two (2)	

Air Quality	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> </ul>	Rank one (1)	It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.
	<ul style="list-style-type: none"> <li>• Carry out regular airborne dust sampling.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Ensure elusive dust does not exceed applicable limits.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Wet loose dust areas.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Restrict speed of vehicles movement at the onsite.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Avoid over-loading of vehicles.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Implement an Integrated Solid</li> </ul>	Rank one (1)	



Solid Waste	Waste Management System onsite.	Rank
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)
Hazardous substances	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	

	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
		Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Monitoring	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	

September 2019- February 2020 (Final inspection before the imposition of COVID-19 Lockdown regulations)

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in February 2020.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 8<sup>th</sup> site inspection was carried out in February 2020 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,



David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

**OPERATIONAL PHASE IMPACTS**

<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>• Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>• Protected plants occurring in the mining area should be marked and avoided at all cost.</li> <li>• Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> <li>• Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
		Rank two (2)	Alien plant task force is recommended.
		Rank three (3)	
		Rank three (3)	
Surface and Ground water	<ul style="list-style-type: none"> <li>• Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> <li>• Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	
		Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
<p>Visual and Sense of Place</p>	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	<p>The National Heritage Council shall be contracted to carry out the archeological assessment in the project area.</p>
<p>Archaeology and Heritage</p>			

	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
Health, Safety and Security	<ul style="list-style-type: none"> <li>• Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	Training should be an on-going exercise.
	<ul style="list-style-type: none"> <li>• Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>• Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	<p>safety procedures and emergency measures.</p> <ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	<p>Rank three (3)</p>	
		<p>Rank three (3)</p>	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	<p>Rank three (3)</p>	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank two (2)</p>	
Traffic	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have</li> </ul>	<p>Rank three (3)</p> <p>Rank one (1)</p>	



	<ul style="list-style-type: none"> <li>good line of sight.</li> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> <li>Transport the materials in the least quantity of trips as possible.</li> <li>Comply to the speed limit of 40km/h.</li> <li>Implement traffic control measures where necessary.</li> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	<ul style="list-style-type: none"> <li>Rank three (3)</li> <li>Rank three (3)</li> <li>Rank three (3)</li> <li>Rank two (2)</li> <li>Rank three (3)</li> </ul>	
	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	<ul style="list-style-type: none"> <li>Rank three (3)</li> <li>Rank one (1)</li> <li>Rank one (1)</li> <li>Rank three (3)</li> </ul>	
Noise	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	<ul style="list-style-type: none"> <li>Rank two (2)</li> </ul>	

<p><b>Air Quality</b></p>	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> <li>• Carry out regular airborne dust sampling.</li> <li>• Ensure elusive dust does not exceed applicable limits.</li> <li>• Wet loose dust areas.</li> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> <li>• Restrict speed of vehicles movement at the onsite.</li> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> <li>• Avoid over-loading of vehicles.</li> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> <li>• Implement an Integrated Solid</li> </ul>	<p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank one (1)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank one (1)</p> <p>Rank one (1)</p>	<p>It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.</p>
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Solid Waste	Waste Management System onsite.	Rank
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)
Hazardous substances	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	

	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	
Monitoring		Rank three (3)	

March 2020- July 2020 (Final Inspection after the lifting/relaxation of the COVID-19 Lockdown regulations)

Report on Environmental Monitoring and Evaluation Inspection was carried out at the copper mine belonging to Luxury Investments One Hundred And Ninety Two Pty, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region, in June 2020.

In accordance with the service level agreement between Healthy Earth Environmental Consultant (HEEC) and Luxury Investments One Hundred And Ninety Two Pty, the 9<sup>th</sup> site inspection was carried out in June 2020 at the mine where mining of base and rare metal (copper ore) is taking place. To ensure that the condition of the Environmental Clearance Certificate is in the outlook, it is imperative to take note that the Environmental Management Plan (EMP) is the main document outlining the intended mitigation and remedial actions that should be undertaken in various stages of a development, for this purpose the operation phase of Luxury Investments One Hundred And Ninety Two Pty, mining project at Otwani. The EMP should be considered as a living and vibrant document that should be altered to improve the continuous mining operation.

To maintain convenience of reference a tabular form of reporting was adopted highlighting on the management actions detailed in the EMP that was approved by the Environmental Commissioner in 2016. During the site visit and inspection, the consultants were accompanied by Mr. Uwe Kramer who is the site manager at the mine. The inspection comprised of two components the initial component entails; ground truthing which includes visual inspection and authentication throughout the mining area and secondly verbal feedback on distinct identified impacts and mitigation measures as defined in the Environmental Management Plan (EMP).

The mitigation measures and the level of compliance therefore have been ranked by means of three ranks, namely rank one (1); ranked as non-compliance and require certain critical intervention, rank two (2) indicating a medium level of compliance and require improvement, rank three (3) high level compliance and it should be maintained or even ameliorated. The legend provides the meaning of the different ranks. Special focus should be given to the mitigation measures ranked one (1) since it is considered to be critical as it reflect non-compliance.

Recommendation and views have been provided on the mitigation measures ranked one (1) as well as the mitigation measures ranked two (2).

Yours faithfully,

*D. Atiyamba*

David Aiyambo

<b>Legend</b>	
High level compliance and it should be maintained or even ameliorated.	Rank three (3)
Medium level of compliance and require improvement	Rank two (2)
Non-compliance and require certain critical intervention	Rank one (1)

<b>OPERATIONAL PHASE IMPACTS</b>			
<b>Impact</b>	<b>Mitigation Measures</b>	<b>Rank</b>	<b>Remarks</b>
Fauna and Flora	<ul style="list-style-type: none"> <li>Clearing of the mining area during the operational phase should be carried out in phases.</li> <li>Protected plants occurring in the mining area should be marked and avoided at all cost.</li> <li>Restore the lost indigenous plant species as compensation of any lost vegetation due to mining.</li> <li>Continuous monitoring of any alien plants growing in the project area.</li> </ul>	Rank two (2)	A restoration program should be commissioned.
		Rank three (3)	Alien plant task force is recommended.
		Rank three (3)	
		Rank three (3)	
Surface and Ground water	<ul style="list-style-type: none"> <li>Dumping of waste products of any kind in or close proximity to any surface water bodies is not permitted.</li> <li>Contaminated runoff from the various operational activities such</li> </ul>	Rank three (3)	
		Rank three (3)	

	<p>as fuel, oil, grease and so forth should be prevented from entering any surface or ground water bodies and where these happened, immediate remedial actions should be taken.</p> <ul style="list-style-type: none"> <li>• Washing of equipment is not permitted onsite.</li> <li>• Avoid the spillage of fuel.</li> <li>• Constantly monitor fuel tanks and supply lines to detect leakages.</li> <li>• In the event of accidental fuel spillage, the effluent should be contained separately as soon as possible.</li> </ul>	<p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p> <p>Rank three (3)</p>	<p>All cleaning of equipment should be done at the car wash with proper storm water system at Otwani.</p>
	<ul style="list-style-type: none"> <li>• The mine pit should blend in with the natural surrounding environment.</li> <li>• The natural appealing of the area should be maintained and improved by planting indigenous trees.</li> </ul>	<p>Rank two (2)</p> <p>Rank two (2)</p>	<p>Stockpiles should be used to maintain the blending of the surrounding natural environment.</p> <p>These plants can be sourced from local forestry nurseries in the region and beyond or Namib Trees CC in Windhoek.</p>
Visual and Sense of Place	<ul style="list-style-type: none"> <li>• The proponent or proponent representative should report any discovery or finding of any</li> </ul>	<p>Rank three (3)</p>	<p>The National Heritage Council shall be contracted to carry out the archeological assessment in the project area.</p>
Archaeology and Heritage			



	archaeological or heritage aspects to the relevant authorities such as the National Heritage Council.		
		Rank three (3)	Training should be an on-going exercise.
Health, Safety and Security	<ul style="list-style-type: none"> <li>Provide occupational health and safety training to all employees.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Ensure that there is a first aid kit available on-site always and a well-trained employee to administer first aid when required.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>A wellness program should be in place to create awareness on health issues, particularly the impact of sexually transmitted diseases.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Provide free condoms in the work place.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Necessitate access to Antiretroviral medication</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Confine unauthorised access to the site and implement access control measures.</li> </ul>	Rank two (2)	
	<ul style="list-style-type: none"> <li>Clearly delineate the pit boundaries along with signage or "no authorized access.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Clearly delineate dangerous areas and no-go areas on site.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Workers and visitors to the pit must be informed of the health and</li> </ul>	Rank three (3)	

	<p>safety procedures and emergency measures.</p> <ul style="list-style-type: none"> <li>All employees must adhere to all the relevant occupational health and safety requirements.</li> <li>The workers should be supplied with all the necessary Personal Protective Equipment where appropriate and should safety gears at all time.</li> </ul>	Rank three (3)	
		Rank three (3)	
Social	<ul style="list-style-type: none"> <li>Ensure that the local people receive the highest economic benefit in term of corporate social responsibilities.</li> </ul>	Rank three (3)	
Economic	<ul style="list-style-type: none"> <li>All the semi-skilled jobs should be offered to the local including skills which are locally available.</li> <li>Adopt the policy of local procurement where commodities are available.</li> <li>Outsourced contracts to credible local SMEs.</li> </ul>	Rank three (3)	
		Rank three (3)	
		Rank two (2)	
Traffic	<ul style="list-style-type: none"> <li>There should be only one access and exist points to the mine to monitor movement.</li> <li>Ensure that road junctions have</li> </ul>	Rank three (3)	
		Rank one (1)	

	<ul style="list-style-type: none"> <li>good line of sight.</li> <li>Vehicles used at the mine must be road worthy and properly serviced at all time.</li> <li>Transport the materials in the least quantity of trips as possible.</li> <li>Comply to the speed limit of 40km/h.</li> <li>Implement traffic control measures where necessary.</li> <li>Reduce the movement of heavy vehicles during peak time.</li> </ul>	<ul style="list-style-type: none"> <li>Rank three (3)</li> <li>Rank three (3)</li> <li>Rank three (3)</li> <li>Rank two (2)</li> <li>Rank three (3)</li> </ul>	
	<ul style="list-style-type: none"> <li>Limit the type of activities that generate excessive noise within the mining area.</li> <li>All areas where noise level exceeds 85 dB should be managed and controlled in line with the relevant guidelines.</li> <li>Noise monitoring levels should be carried to ensure that a noise level doesn't exceed acceptable level.</li> <li>Equipment's should be serviced regularly to avoid emitting excessive noise.</li> </ul>	<ul style="list-style-type: none"> <li>Rank three (3)</li> <li>Rank one (1)</li> <li>Rank one (1)</li> <li>Rank three (3)</li> </ul>	
Noise	<ul style="list-style-type: none"> <li>Control activities that contribute to air pollution.</li> </ul>	<ul style="list-style-type: none"> <li>Rank two (2)</li> </ul>	

<p><b>Air Quality</b></p>	<ul style="list-style-type: none"> <li>• Ensure that emissions from any activity within the mining area is within the World Health Organisation (WHO) Air Quality Guidelines.</li> </ul>	<p>Rank one (1)</p>	<p>It is recommended that regular dust sampling should be carried out to ensure compliance to WHO, Air Quality Guidelines. The sampling can be conducted at pre-determined intervals.</p>
	<ul style="list-style-type: none"> <li>• Carry out regular airborne dust sampling.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Ensure elusive dust does not exceed applicable limits.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Wet loose dust areas.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Consider the application of dust suppressants such as Dustex to reduce dust from getting airborne.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Restrict speed of vehicles movement at the onsite.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• The site manager, overseeing the operational activities of the mine should stop the operation during strong wind events and only commence when the wind calms down.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Avoid over-loading of vehicles.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>• Pre and regular testing of employees for effect of exposure to dust emissions at recognized health facility.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• Implement an Integrated Solid</li> </ul>	Rank one (1)	

Solid Waste	Waste Management System onsite.	Rank
	<ul style="list-style-type: none"> <li>Place priority on waste prevention, reduction and waste recycling.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Avoid burning waste</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>Place distinct bins to separate and collect various types of waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Contract a local SME to collect and discard waste at the designated landfill with a valid ECC.</li> </ul>	Rank two (2)
	<ul style="list-style-type: none"> <li>Substantial number of waste bins must be placed around the mine.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>Enough skip containers should be placed at the designated area for heavy waste.</li> </ul>	Rank one (1)
	<ul style="list-style-type: none"> <li>In the absence of the above solid waste can be collected and disposed of at an appropriate landfill in Opuwo in consultation with the Opuwo Town Council.</li> </ul>	Rank three (3)
	<ul style="list-style-type: none"> <li>All workers should be trained on how to handle chemical and hazardous substances this must as well include First Aid.</li> </ul>	Rank three (3)
Hazardous substances	<ul style="list-style-type: none"> <li>Storage area for all substances should be properly secure and in position to hold 120% of the total</li> </ul>	Rank three (3)

	volume of a given substance stored on site.		
Land use alteration and degradation	<ul style="list-style-type: none"> <li>Develop a site plan to avoid haphazard excavation and trenching.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Limit mining activities within the boundaries of the mining claims area.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Access routes must be clearly marked to prevent conflict with movement.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Rehabilitation of the mine pit must be carried out on a continuous basis; rehabilitate the pit as soon as mining in a targeted area has been completed.</li> </ul>	Rank one (1)	
Existing service infrastructure	<ul style="list-style-type: none"> <li>Continue to explore the establishment of a solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Obtain an Environmental Clearance Certificate for the solar energy plant.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>Explore initiative focusing on water conservation such as rain water harvesting and waste water in line with applicable local authority by-laws.</li> </ul>	Rank one (1)	

	<ul style="list-style-type: none"> <li>• Re-use of treated waste water should be considered wherever possible to reduce the consumption of portable water.</li> <li>• Comply with the water quality guideline in term of The Water Act, 1956.</li> </ul>	Rank one (1)	
	<ul style="list-style-type: none"> <li>• All employees must undergo through an induction course and all the necessary health, safety and environmental consideration should be emphasized.</li> <li>• All environmental training and accidents should be recorded.</li> </ul>	Rank three (3)	
Environmental Management Plan (EMP) Training	<ul style="list-style-type: none"> <li>• An Environmental Practitioner should monitor the execution of the Environmental Management Plan and recommend any modification where necessary.</li> <li>• The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> <li>• Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	
Monitoring		Rank three (3)	

	<ul style="list-style-type: none"> <li>The Environmental Practitioner should inspect the site on regular basis if possible, on monthly or bi-monthly.</li> </ul>	Rank three (3)	
	<ul style="list-style-type: none"> <li>Biannual reports are to be submitted to the Ministry of Environment, Forestry and Tourism.</li> </ul>	Rank three (3)	



#### **4. ANNEXURE B**

Site photos for the Luxury Investments One Hundred And Ninety Two Pty mine for base and rare metals (copper) on mining claims; 69776, 69777, 69778, 69779, 69780 & 69781, at Farm Otwani, Otwani Village, Opuwo Rural Constituency, Kunene region.



Entrance to the mine (with personnel stationed at the gate to ensure adherence to COVID19 regulation)



Luxury Investments One Hundred And Ninety Two Pty- copper ore processing plant at Otwani



Luxury Investments One Hundred And Ninety Two Pty (Active Mine - Pit)



Copper ore ready for processing- crushing, washing, drying and packaging

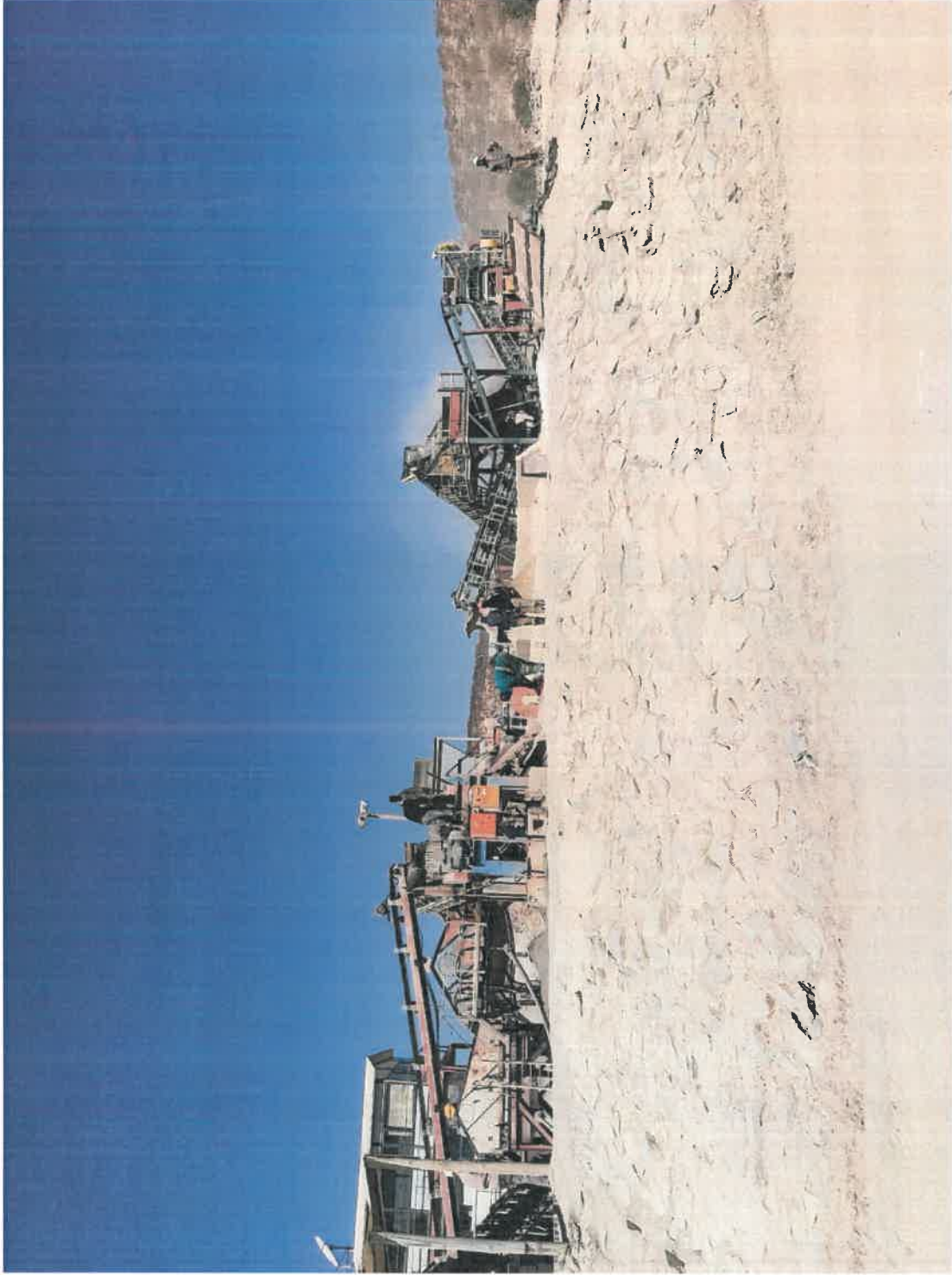


*Argemone mexicana* – alien plant recorded in the mining area to be removed









**ANNEXURE C: PREVIOUSLY ISSUED ENVIRONMENTAL CLEARANCE CERTIFICATE**

