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Title	ENVIRONMENTAL MANAGEMENT PLAN FOR THE RENEWAL OF THE ENVIRONMENTAL CLEARANCE CERTIFICATE **(ECC-00396)** FOR THE CONTINUED MINING ACTIVITIES FOR DIMENSION STONES ON MINING CLAIM 71544, KARIBIB DISTRICT, ERONGO REGION.
HEEC Reference	HEEC031/2022
Proponent	Mr. Sydney Huberth Lesley Goagoseb 928 Aries Street, Wanaheda. P.O. Box 61040, Katutura, Windhoek Namibia Contact Person: Sydney Goagoseb Contact Number: +264 81 305 0005 Email: sedos777@gmail.com
Report date	October 2022

	Name	Signature	Date
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ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
PR	Proponent's Representative
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GG	Government Gazette
GIS	Geographic Information System
GN	Government Notice
GPS	Global Positioning System
HIV	Human Immuno-deficiency Virus
I&APs	Interested and Affected Parties
NHC	National Heritage Council
Reg.	Regulation
S	Section
TB	Tuberculosis

1 INTRODUCTION

Karibib is home to the Karibib Marble and Granite Works. This highly specialized industry processes some of the high quality marble deposits that have been found in the country, with a large percentage being exported. Karibib owes its existence to the advent of railroad development between the coast and inland Namibia, and in fact the Karibib railway building is a national monument. Nowadays, this lively little town is best known for the Navachab gold mine, (not open to the public) 5km south-west of the town. The town renowned for the high quality marble (considered to be the hardest in the world) mined near the town. It was used in various government buildings in Namibia, Parliament buildings in Cape Town and during the construction of Frankfurt International airport. Mining is an important sector in the Namibian economy. The sector contributes significantly to GDP, export revenues and government tax receipts. The expansion and development of this sector is however constrained by mainly insufficient investment in mineral exploration. Globalisation has impacted on the market for international investments by increasing the levels of competition for financial resources.

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 (Draft Minerals Policy of Namibia, MME).

It is with this background that Mr. Sydney Hubert L. Goagoseb has decided to continue mining dimension stones for export purposes to external markets via the Walvis Bay Port and derive the monetary benefits associated with the extraction of these natural resources as he is a holder of an application for mining claim 71544 from the Ministry of Mines and Energy after following all the necessary procedures to satisfy the relevant Authorities enabling them to mine the dimension stones from the allocated portions on the Okawayo Mountains.

However uncontrolled natural resource mining/ excavation has resulted in negative environmental effects in some areas in the country. This has been largely attributed to the fact that people were under no obligation to rehabilitate the affected areas and thus left behind large open pits/quarries which pose a danger to both humans and animals. From the point of view of the environmental impact created, dimension stone mining is a relatively benign industry. There are no emissions besides those of the diesel powered earthmoving equipment utilised in its extraction and a small amount of blasting gases. Contamination of water resources is only likely in the event of petrochemical spillages from storage facilities and equipment, and these can largely be either prevented or

cleaned up effectively. The major environmental impacts are of a visual nature, while in sensitive areas, sense of change of place and habitat destruction may become significant impacts.

Mr. Sydney Hubert L. Goagoseb, hereinafter referred to as the proponent intends to carry out the following activity:

- **Environmental Management Plan (EMP) for the renewal of the Environmental Clearance Certificate (ECC-00396) and continuation of mining activities for dimension stones on mining claim 71544, Karibib District, Erongo Region.**

The objective of the intended Environmental Assessment is thus needed in order to assess the potential social and environmental impacts associated with the ongoing mining activities to facilitate the renewal of the Environmental Clearance Certificate (ECC-00396) that was issued on 05-12-2019 and expires on 05-12-2022 (see Attached in Annexure B) to allow for the continued sustainable mining of dimension stones on mining claim 71544, Karibib District, Erongo Region and also to formulate methods of rehabilitation of the open quarry pits at the claim area.

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).

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 1** were triggered by the proposed project:

Table 1: List of triggered activities identified in the EIA Regulations which apply to the proposed 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
Activity 3.1 (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 proposed project includes the continued mining of dimension stones for export purposes.
Activity 3.2 (Mining and Quarrying Activities)	Other forms of mining or extraction of any natural resources whether regulated by law or not.	The proposed project entails the continued extraction of dimension stones for export purposes.
Activity 3.3 (Mining and Quarrying Activities)	Resource extraction, manipulation, conservation and related activities.	The proposed project entails the continued extraction of dimension stones for export purposes.

An Environmental Management Plan (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 EMP details the mitigation and monitoring actions to be implemented during the following phases of these developments:

- Dimension stone mining Phase – the period during which the proponent, having dealt with the necessary legislative and administrative arrangements, appoints a contractor to engage in the extraction of dimension stones from the project site to be transported to the Walvis Bay Port for export purposes;
- Transportation Phase- the period during which the proponent transports the dimension stones from the quarry to Walvis Bay port for export.

- Dressing Phase- the period during which the proponent processes the excavated dimension stones, further processing will be done at the target export market areas and therefore is not in the scope of this renewal EMP.

The rehabilitation of the quarries at the dimension stone mining claim site 71544 once activities have ceased is highly recommended so as to ensure that the subject area assumes economically viable alternative land uses and not pose a drowning threat/injury to the livestock and locals making use of these Reserve lands; when the event occurs then some recommendations have been outlined in **Table 4.**

2 ROLES AND RESPONSIBILITIES

The proponent (Mr. Sydney Hubert L. Goagoseb) is ultimately responsible for the implementation of the EMP, at the dimension stone mining phase to the quarry rehabilitation phase of the existing dimension stone mining activities at the mining claim 71544, Karibib District, Erongo Region. 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 (Mr. Sydney Hubert L. Goagoseb).

2.1 PROPONENT'S REPRESENTATIVE

Mr. Sydney Hubert L. Goagoseb, the proponent, has assigned the responsibility of managing all aspects of this development for all development 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 developments, or may assign a different PR to each of the development phases – i.e. one for the dimension stone mining & one for the quarry rehabilitation phase. The PR's responsibilities are as follows:

Responsibility	Project Phase
Making sure that the necessary approvals and permissions laid out in **Table 2** are obtained/adhered to	Throughout the lifecycle of this project

Suspending/evicting individuals and/or equipment not complying with the EMP	• Dimension stone mining • Transportation of dimension stones • Quarry rehabilitation
Issuing fines for contravening EMP provisions	• Dimension stone mining • Transportation of dimension stones • Quarry rehabilitation.

2.2 ENVIRONMENTAL CONTROL OFFICER

The PR should assign the responsibility of overseeing the implementation of the updated EMP on the ground during the dimension stone mining & quarry rehabilitation phases to a designated member of staff, referred to in this EMP as the Environmental Control Officer (ECO). The PR/ Mr. Sydney Hubert L. Goagoseb 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 DIMENSION STONE MINING & QUARRY REHABILITATION CONTRACTOR

A contractor, in this case being the proponent, conducts the dimension stone mining & quarry rehabilitation activities at the mining claim 71544, Karibib District, Erongo Region and is therefore automatically responsible for implementing all provisions contained within the relevant chapters of this EMP. The dimension stone mining & quarry rehabilitation contractor will be responsible for the implementation of this EMP applicable to any work outsourced to subcontractors. **Table 3** applies to contractors appointed during the dimension stone mining phase and **Table 4** to those appointed during the continuous quarry rehabilitation phase. In order to ensure effective environmental management the aforementioned chapters should be included in the applicable contracts for outsourced work relating to the intended activities.

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.

3 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 2**);
- Dimension stone mining Actions (**Table 3**);
- Quarry rehabilitation Management Actions (**Table 4**); and
- Decommissioning phase management actions (**Table 5**).

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 based on the scoping-level Environmental Assessment (EA) conducted for the operation and management of the continued dimension stone mining & quarry rehabilitation activities as represented in **Figure 2**. HEEC will not be held responsible for the potential consequences that may result from any alterations to the agreed course of action in terms of the intended activities on the mining claim 71544 and the surrounding area.

It is assumed that labourers will be sourced mostly from the Karibib Constituency area and that migrant labourers (if applicable) will be housed within established pre-fabricated accommodation facilities at the designated base camp area on the mining claim.

3.2 APPLICABLE LEGISLATION

There are multiple legal instruments that regulate and have a bearing on good environmental management in Namibia. **Table 2** below provides a summary of the legal instruments considered to be relevant to the continued dimension stone mining & quarry rehabilitation activities and the environmental assessment process.

Table 2: Legal provisions relevant to these activities

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 continued 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 must 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.	**Activity 3.1 (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. **Activity 3.2 (Mining and Quarrying Activities)** Other forms of mining or extraction of any natural resources whether regulated by law or not. **Activity 3.3 (Mining and Quarrying Activities)** Resource extraction,

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
		manipulation, conservation and related activities.
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The continued dimension stone mining & quarry rehabilitation 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 EA 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 continued dimension stone mining & quarry rehabilitation activities do not lead to the degradation of the natural beauty of the surrounding farmland 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 dimension stone mining & quarry rehabilitation activities.
The Ministry of Environment and Tourism (MET) Policy on HIV & AIDS	MET 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 when migrant construction workers/labourers interact with local communities.
Local Authorities Act No. 23 of 1992	The Local Authorities Act prescribes the manner in which a town or municipality should be managed by the Town or Municipal Council. Sections 34-47 make provision for the aspects of water and sewerage.	Dimension stone mining & quarry rehabilitation activities have to comply with provisions of the Local Authorities Act.
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 dimension stone mining & quarry rehabilitation activities, compliance with the law is essential.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
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).	Dimension stone mining & quarry rehabilitation 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 EIA 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 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	The continued activity involves the mining of dimension stones for export purposes.

LEGISLATION/POLICIES	RELEVANT PROVISIONS	RELEVANCE TO PROJECT
	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;	
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	Soils should not be polluted or left un-rehabilitated.

3.3 PROJECT LOCATION

The proponent intends to continue mining dimension stone as cubes on the mining claim 71544, Karibib District, Erongo Region, located adjacent to the D1941 road, off the main C33 from Karibib to Omaruru. Refer to the locality map of mining claim 71544 in **Figure 1** for the locality of the mining activities for the dimension stones.

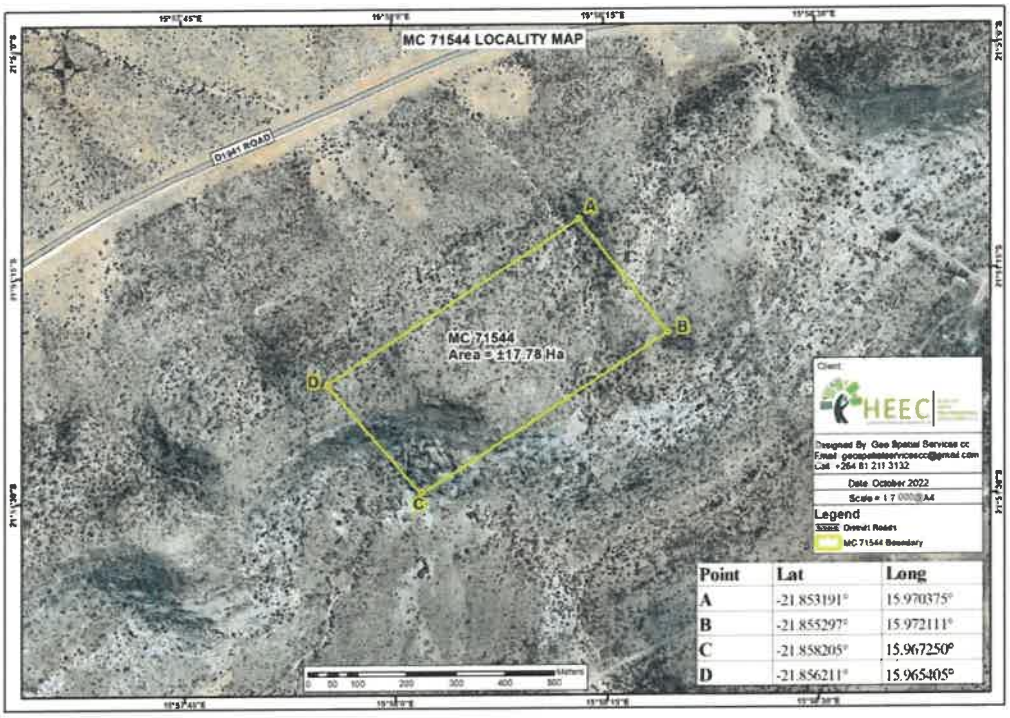

Figure 1: Locality map of mining claim 71544, (yellow quadrant) Karibib District in the Erongo Region (HEEC, 2022)

3.4 DIMENSION STONE MINING PHASE

The PR should ensure that the management actions detailed in **Table 3** below should be adhered to during the operation of the dimension stone mining activities and should be undertaken together with the mitigation measures in **Table 8** of the FESR.

Table 3: Dimension Stone Mining Phase Management Actions

Aspect	Management Actions
Environmental Incidents	• 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): ➢ Fires; ➢ Drowning; ➢ Accidents (e.g. traffic); ➢ Spills of hazardous materials, contaminating soil or water resources; ➢ Non-compliances with applicable legislation; and ➢ Non-compliances with this EMP. • 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. • 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.
Traffic	• Ensure that road junctions have good sightlines. • Limit the type of vehicle (heavy trucks) allowed on site. • 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 D1941 access tracks and the C33 main road from Karibib to Omaruru. • Designate no-drive zones.

Aspect	Management Actions
	• Implement traffic control measures where necessary by keeping a number plate register of all vehicles transporting dimension stones at the site and restricting access to authorised contractors.
Quarries/Dimension stone mining claim areas (70260, 70261, 70319, 70320 & 70321)	• Dimension stones should be sourced from quarries with a valid ECC. • The dimension stone mining claim must be clearly demarcated by means of a perimeter stock-proof fence with a lockable gated entrance. • Dimension stone mining and resultant operations shall only take place within this demarcated area/claim. • A detailed photographic record of the demarcated mining claim area, 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. • There will be **'No unauthorised access'** signs at the mining claim 71544 gates until to restrict entry and/or harm to people not involved in the dimension stone mining operations.
EMP training	All workers at the site are to undergo EMP training that should include as a minimum the following: • Explanation of the importance of complying with the EMP. • Discussion of the potential environmental impacts of the ongoing dimension stone mining and quarry rehabilitation activities. • Employees' roles and responsibilities, including emergency preparedness and response requirements. • Explanation of the mitigation measures that must be implemented when particular work groups carry out their respective activities. • The potential consequences of departure from specified operating procedures; and rewards for enhancing mitigation measures or avoiding negative environmental effects.
Fauna and Flora	• Prevent the destruction of protected tree species. • Encourage the regrowth and regeneration of trees with exposed roots at the site.

Aspect	Management Actions
	• The excavation of the dimension stones should incorporate existing trees[1]. • The Contractor should compile a Tree Management Plan which should include the following as a minimum: o 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; o Trees, which are impossible to conserve, need to be identified and their location recorded on a map; o The Contractor should apply to the relevant authority (Ministry of Agriculture, Water & Forestry) for a permit to remove these trees. o 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; o Each tree that is removed needs to be replaced with an indigenous tree species; o Some of these trees can be obtained at the nearest forestry office or at a commercial nursery such as the Forestry office in Karibib. Assistance can be sought from the nearest forestry office regarding nearby nurseries where additional trees may be bought and advice sought. • Only a limited width +/- 5 m on the side of the access roads may be partially cleared of vegetation. • Workers are prohibited from collecting wood or other plant products on or near the site. • No alien species may be planted on or within the existing site. • Prevent contractors from collecting wood and veld food such as amphibians, migrating birds, etc. during the dimension stone mining phase. • Prevent contractors from fishing in the nearby ephemeral rivers or catching aquatic species.

[1]a "tree" is defined as an indigenous woody perennial plant with a trunk diameter ≥150 mm

Aspect	Management Actions
Lay-down areas and materials camp	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: • The areas designated for the services infrastructure should be used as far as possible. • Second option should be degraded land. • Avoid sensitive areas (e.g. wetlands/rivers/drainage lines)
Hazardous waste	• All heavy duty vehicles and equipment on site should be provided with a drip tray. • All heavy duty delivery vehicles should be maintained regularly to prevent oil leakages. • Maintenance and washing of vehicles should take place only at a designated workshop area. • Workshops may be prone to hydrocarbon spillages that change the soil chemistry and may affect groundwater quality (only in severe cases). If fuel is stored on site, there is a possibility of spontaneous combustion that may lead to uncontrollable fires, groundwater and soil contamination. • 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.
Surface and Ground Water Impacts	• It is recommended that dimension stone mining takes place outside of the rainy season in order to limit erosion & flooding on site and surface water pollution. • No dumping of waste products of any kind in or in close proximity to surface water bodies. • 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. The stationary plant must be fitted with drip trays to avoid groundwater contamination. • Contaminated runoff from the sites should be prevented from entering the surface water bodies. • Workers should be given ablution facilities at the sites that are located at least **30 m** away from any surface water and regularly serviced.

Aspect	Management Actions
	• Washing of personnel or any equipment should not be allowed on site.
Topsoil	• When excavations are carried out, topsoil[2] should be stockpiled in a demarcated area and used in profiling and rehabilitating of the depleted, open quarries at the mining claims at the farm. • Stockpiled topsoil should be used to rehabilitate post-harvesting degraded areas and/or other nearby degraded areas within the Karibib Constituency in consultation with the Karibib Municipality office.
Soil Erosion	• Clear the vegetation of the project area in phases during the dimension stone mining period in order to keep the soil more compacted as well as to limit overall disturbance to the area over time. • It is recommended that most dimension stone mining takes place outside of the rainy season in order to limit potential flooding and the run off of loose soil causing further erosion. • Appropriate erosion control structures must be put in place where soil may be prone to erosion. • 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.
Rehabilitation	• Upon completion of the dimension stone mining phase consultations should be held with the local community/property owner(s) regarding the post-dimension stone mining use of remaining excavated areas (if applicable) and to identify priority areas. • Sand/waste rock at the site should be levelled so it can be reclaimed for other purposes once the dimension stone mining has ceased and rather than leaving the quarries open which will pose a threat to people and animals in the area. • In the event that no post-operation uses are requested, all excavated/degraded areas need to be rehabilitated as follows:

[2] Topsoil is defined here as the top 150mm of surface material, which accounts for the seedbank.

Aspect	Management Actions
	○ 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. ○ Rehabilitated excavated areas need to match the contours of the existing landscape. ○ 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. ○ Topsoil is to be spread across excavated areas evenly. ○ 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. ○ Ripping should be done along slopes, not up and down a slope, which could lead to enhanced erosion.
HIV/AIDS, Covid19 and TB awareness	• 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. • A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted & respiratory diseases such as TB & Covid19. • Provide free condoms in the workplace and to local community throughout project operation. • Facilitate access to Antiretroviral medication & PPE • Personnel should not overnight at the dimension stone mining claim sites, but only the security personnel.
Road safety	• Demarcate roads clearly. • Off-road driving should not be allowed. • All vehicles that transport materials to and from the site must be roadworthy. • Drivers that transport materials should have a valid driver's license and should adhere to all traffic rules. • Loads upon vehicles should be properly secured to avoid items falling off the vehicle. • Limit and control the number of access points to the mining claim sites.

Aspect	Management Actions
	• The road leading to the mining claim 71544 should be properly maintained so as to reduce dust emissions when heavy vehicles travel on them.
Safety around work sites	• **All rotary saws that are not being actively used for the dimension stone cutting must be tightly secured to rails to avoid injury to mine personnel if they accidentally fall due to wind or any other factors.** • Excavations/quarries should be left open for the shortest time possible. • 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. • Demarcate excavated areas and topsoil stockpiles with danger tape. • Provide additional warning signage in areas of movement and in "no personnel" areas where workers are not active. • Quarries are to be fenced-off with stock-proof perimeter fencing. • Work areas must be set out and isolated with danger tape on a daily basis. • All materials and equipment are to be stored only within set out and demarcated work areas. • Only dimension stone mining personnel will be allowed within these work areas. • 2 fire extinguishers or more should be available at fuel storage areas. • Comply with all waste related management actions stated above in this table.
Ablutions	• Separate toilets should be available for men and women and should clearly be indicated as such. • Portable toilets (i.e. easily transportable) should be available at the quarry site: o 1 toilet for every 15 females. o 1 toilet for every 30 males.

Aspect	Management Actions
	○ Sewage needs to be removed on a regular basis to an approved (municipal) sewage disposal site in Karibib. Alternatively, sewage may be pumped into sealable containers and stored until it can be removed. ○ Workers responsible for cleaning the toilets should be provided with latex gloves and masks.
Open fires	No open fires may be made anywhere on the mining claim site.
General health and safety	• A fully stocked first aid kit (with unexpired medicines, include a snake bite kit) should permanently be available on-site as well as an adequately trained member of staff capable of administering first aid. • All workers should have access to the relevant personal protective equipment (overalls, hard toe boots, goggles, dust masks, sun hats heavy duty gloves etc.). • Sufficient potable water reserves should be available to workers at all times. • No person should be allowed to smoke close to fuel storage facilities or portable toilets (if toilets are chemical toilets – the chemicals are flammable). • No workers should be allowed to drink alcohol during work hours. • No workers should be allowed on the mining claim/quarries if under the influence of alcohol.
Dust	• 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. • The use of waterless dust suppression means (e.g. lignosulphonate products such as Dustex) should be considered. • Cover any stockpiles with plastic to minimise windblown dust. • Dust protection masks should be provided to workers if they complain about dust. • During high wind conditions the contractor must make the decision to cease works until the wind has calmed down.

Aspect	Management Actions
Noise	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. ➢ 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.
Recruitment of labourers	The Contractor should compile a formal recruitment process including the following provisions as a minimum: • 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.). • Recruitment should not take place at the dimension stone mining claim site. • Ensure that all sub-contractors are aware of recommended recruitment procedures and discourage any recruitment of labour outside these agreed upon procedures. • 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. • 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.
Communication plan	The Contractor or PR should draft a Communication Plan, which should outline as a minimum the following: • How Interested and Affected Parties (I&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; • How these I&APs will be consulted on an on-going basis;

Aspect	Management Actions
	• 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.
General communication	• The PR must appoint an ECO to liaise between the Contractor, I&APs and Mr. Sydney Hubert L. Goagoseb's management. • The Contractor shall at every bi-monthly site meeting report on the status of the implementation of all provisions of the EMP. • The Contractor should implement the EMP awareness training as stipulated above in this table. • The Contractor must list the I&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. • The Communication Plan, once agreed upon by the Developer, shall be legally binding. • A copy of the EMP must be available at the site office and should be accessible to all I&APs. • 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 quarries. • The Contractor should liaise with the proponent regarding all issues related to community consultation and negotiation before operation commences/resumes. • A procedure should be put in place to ensure that concerns raised have been followed-up and addressed. • All people on the I&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.

Aspect	Management Actions
Archaeology	• Should a heritage site or archaeological site be uncovered or discovered during the dimension stone mining phase of the project, a "chance find" procedure should be applied in the order they appear below: o If operating machinery or equipment stop work; o Demarcate the site with danger tape; o Determine GPS position if possible; o Report findings to the site foreman; o Report findings, site location and actions taken to superintendent; o Cease any works in immediate vicinity; o Visit find site and determine whether work can proceed without damage to findings; o Determine and demarcate exclusion boundary; o Site location and details to be added to a Geographic Information System (GIS) for field confirmation by archaeologist; o Inspect site and confirm addition to dimension stone mining site GIS; o Advise the National Heritage Council (NHC) and request written permission to remove findings from work area; and o Recovery, packaging and labelling of findings for transfer to National Museum. • Should human remains be found, the following actions will be required: o Apply the chance find procedure as described above; o Schedule a field inspection with an archaeologist to confirm that remains are human; o Advise and liaise with the NHC and Police; and o Remains will be recovered and removed either to the National Museum or the National Forensic Laboratory.

3.5 QUARRY REHABILITATION PHASE (Continuous)

The management actions included in **Table 4** below applies during the continuous quarry rehabilitation phase of the mining operations and should be undertaken together with the mitigation measures in **Table 9** of the FESR.

Table 4: Quarry Rehabilitation Phase Management actions

Environmental Feature	Management Actions
EMP training	All contractors appointed for the transportation of the dimension stones on mining claim 71544 must ensure that all personnel are aware of necessary health, safety and environmental considerations applicable to their respective work.
Monitoring	The ECO should monitor the implementation of the EMP: • The ECO should regularly inspect the conditions around the dimension stone cutting mining claim site before work starts; and • The ECO should inspect the mining claim site at the end of each extraction period.
Water and waste management	• Ensure that the infrastructure at the dimension stone cutting site is connected to the mining claim drainage and wastewater reticulation. • Regular preventative maintenance should be carried out on the infrastructure to ensure that risks of overspills/leakages are minimised. • A no-go buffer area of at least **30 m** should be allocated to any water bodies in the area. • No dumping of waste products of any kind in or in close proximity to any surface water bodies. • 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. • The site shall be kept clean and free of litter and no litter from the site shall be allowed to disperse to surrounding areas. • All personnel shall be instructed to dispose of all waste in the proper manner. • 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. • All materials (e.g. explosive cartridges) must be suitably stored and protected, so that they do not become damaged and unusable.

Environmental Feature	Management Actions
	• The Contractor shall be responsible for the regular disposal (at suitable and licensed municipal waste disposal facilities) of all waste generated as a result of the dimension stone cutting/mining. • Contaminated runoff from the various operational activities should be prevented from entering any surface water bodies. • 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. • Disposal of waste from the properties should be properly managed. • No waste may be burned on site. • General waste is to be collected either by the local Municipality or removed by the proponent. • The frequency of collections will be such that waste containment receptacles do not unduly accumulate or overflow.
Energy efficiency	• The use of solar energy should be encouraged to provide for general lighting and heating of water and buildings. • The use of water saving initiatives should be incorporated within the workers' pre-fabricated housing design in order to reduce water demand.

3.6 DECOMMISSIONING PHASE

Mine closures can be planned for and should form part of an integrated land use strategy that involves the community and farm owner. The decommissioning of the dimension stone mining at the claim site 71544 is envisaged in the future. Planned closure, in consultation with the community/farm owner, 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 5**.

Table 5: Decommissioning phase management actions

Environmental Feature	Management Actions
Deconstruction activity	Many of the mitigation measures prescribed for the dimension stone mining & quarry rehabilitation activities (**Table 3 & 4** 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 **Table 3 & 4** above.

4 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 1April 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 $CaCO_3$	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_4	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_2S	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^3 or litre

2.3 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 $CaCO_3$	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 $CaCO_3$	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: Phospates 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_2
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 (!gravimetric 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_2.

Note (1) on phosphate: Phospates 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

WINDHOEK, DATE STAMP

5 ANNEXURE B: PREVIOUSLY ISSUED ENVIRONMENTAL CLEARANCE CERTIFICATE (ECC-00396)

ECC – 00396 Serial: NrC6cz396

REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE

ISSUED

In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)

TO

Sydney Hubert Lesley Goagoseb
P. O Box 61040, Katutura Windhoek, 928 Aries street.

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

Mining Claim No. 71542 -71546 For Dimension Stones,at Karibib District, Erongo Region.

DEPUTY ENVIRONMENTAL COMMISSIONER

Issued on the date: **2019-12-05**

Expires on this date: **2022-12-05**

(See conditions printed over leaf)

This certificate is printed without erasures or alterations