Reptile Mineral Resources and Exploration (Pty) Ltd

EXPLORATION ENVIRONMENTAL MANAGEMENT PLAN

December 2021

Reptile Mineral Resources and Exploration (Pty) Limited
(**Tenement Manager**)
for

EPL3496 (Tubas)
EPL3497 (Tumas)
MDRL3498 (Aussinanis)
EPL3669 (Tumas North)
EPL3670 (Chunguchoab)
EPL6820 (Rooikop East)

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COPY

Reptile Mineral Resources and Exploration (Pty) Ltd

7 December 2021

Mr Timo Mufeti
The Environmental Commissioner
Department of Environmental Affairs
Ministry of Environment, Forestry and Tourism
Private Bag 13306
Windhoek

For Attention: Ms Lely Saima Angula – Director of Environmental Assessment

Dear Ms Angula,

RE: Update Environmental Management Plan for Exploration

Reptile Mineral Resources and Exploration (Pty) Ltd [RMR] hereby respectfully submits an updated Environmental Management Plan [EMP] for its exploration activities exploration activities conducted by RMR on behalf of its subsidiaries on the following Exclusive Prospecting Licences [EPLs] and Mineral Deposit Retention Licences (MDRL):

1. EPL3496 (Tubas), EPL3497 (Tumas), EPL6820 (Rooikop East) – granted to Reptile Uranium Namibia (Pty) Ltd [RUN]
2. MDRL3498 (Aussinanis)* - granted to Yellow Dune Uranium Resources (Pty) Ltd [YDU]
3. EPL3669 (Tumas North) & 3670 (Chungochoab) – RUN joint venture with Nova Energy (Africa) (Pty) Ltd [NOVA]

**Please note: EPL3498 was converted to MDRL3498 in January 2020*

This updated EMP consolidates and updates the following EMPs previously submitted and approved by the Ministry:

- Environmental Impact Assessment & Environmental Management Plan for EPL's 3496, 3497 & 3499 – Colin Christian and Associates CC- August 2006 (Christian, 2006).
- Reptile Uranium Exploration Project – EPL3498 Aussinanis – July 2007. An addendum to: Environmental Impact Assessment & Environmental Management Plan for EPL's 3496, 3497 & 3499 (Scholtz, 2007).
- Environmental Overview & Environmental Management Plan for Starting Right Investments Eighty (Pty) Ltd (now called Nova Energy (Africa) (Pty) Ltd). Exclusive Prospecting Licences [EPL] 3668, 3669 and 3670 – January 2007 (Speiser, 2007).
- Environmental Impact Assessment and Environmental Management Plan for Exploration on EPL 6820. PN Hooks May 2018 (Hooks, 2018).

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www.deepyellow.com.au
Directors: Anne Janse van Rensburg (South African, Namibian), John Borshoff (Australian)

Reptile Mineral Resources and Exploration (Pty) Ltd

There has been no material change in the exploration activities as conducted by RMR. The updated and consolidated EMP reflects the current landholding that has reduced in size and also recognised recent internal management and reporting line changes.

Please do not hesitate to contact either myself or RMR's Safety, Health, Environment Manager, Mr Johann van der Merwe, should you require any further information.

Sincerely yours,

Dr Katrin Kärner
Exploration Manager

PO Box 2538 Swakopmund, Namibia, 9000 / 48 Hidipo Hamutenya Street, Swakopmund
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Directors: Anne Janse van Rensburg (South African, Namibian), John Borshoff (Australian)

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1 INTRODUCTION

1.1 Background

Reptile Mineral Resources and Exploration (Pty) Ltd (RMR) is a wholly owned subsidiary of Australian listed company Deep Yellow Limited (DYL). RMR is the Manager of the DYL Group's Namibian tenement holdings in the Erongo Region. The tenements are listed below and shown on Figure 1. All tenements are located within the Namib Naukluft National Park (NNNP) (Figure 1).

- EPL3496 (Tubas).
- EPL3497 (Tumas).
- MDRL3498 (Aussinanis).
- EPL3669 (Tumas North).
- EPL3670 (Chunguchoab).
- EPL6820 (Rooikop East).

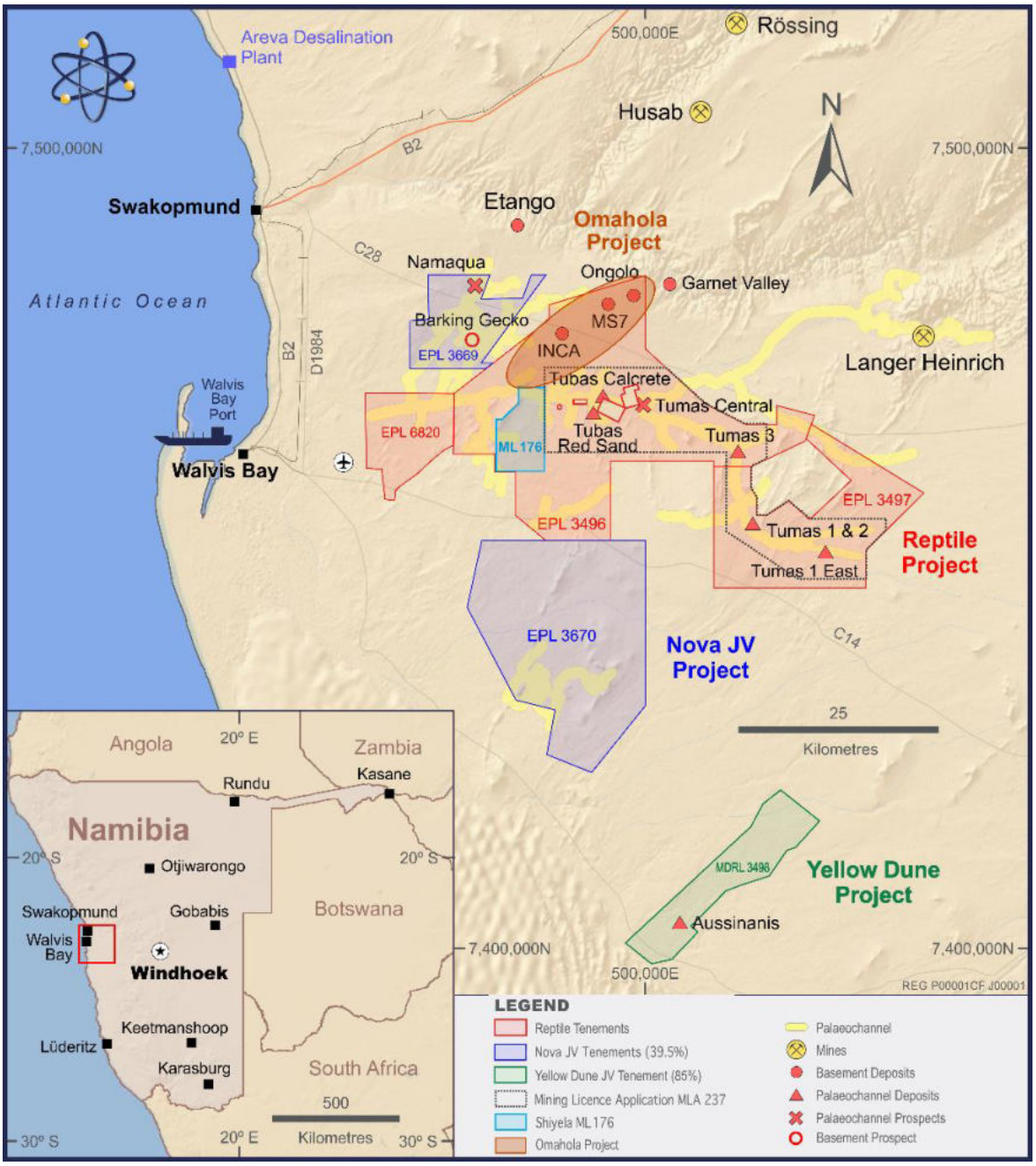


Figure 1: *DYL Group Tenement Holdings Namibia.*

1.2 Namib Naukluft National Park

RMR tenements lie within the boundaries of the NNNP, which is considered a sensitive landscape. The legal establishment of the present NNNP commenced in 1907 when, under German colonial rule, the area was proclaimed as a game reserve. This area encompassed mainly the northern part of the current Park that falls within the Erongo Region (Softchem, 2005).

The Ministry of Environment, Forestry and Tourism (MEFT) administers the NNNP and is responsible for maintaining the Park facilities. Visitors and non-MEFT residents of the Gobabeb Centre (located at the Kuiseb River) require entry permits to the NNNP that outline their activities within the Park. These permits normally allow visitors access to the Park and to stay overnight at lookouts and camp sites (Softchem., 2005).

1.3 Purpose of the Environmental Management Plan

The purpose of this Environmental Management Plan (EMP) is to ensure that all environmental aspects and impacts that may result from exploration activities conducted on the DYL Group tenements are identified and appropriately managed. This EMP is a key management tool for those involved in the exploration activities and includes details of specific management actions.

The EMP provides some background information on the existing environment and proposes management measures to mitigate or minimise potential environmental impacts of the exploration activities. The EMP is intended to give effect to the recommendations of the Environmental Impact Assessments (EIA) prepared for the various exploration tenements listed in this EMP.

All personnel, including contractors, who will be involved in the field exploration activities, are to be familiar with the EMP and made aware of the environmental issues and the means to avoid or minimise the potential impacts of activities on the environment through induction and regular toolbox talks.

The EMP for the exploration projects is based on the several assessments completed since 2006 for both exploration and proposed development projects and contained in the following documents:

- Environmental Impact Assessment & Environmental Management Plan for EPL's 3496, 3497 & 3499 – Colin Christian and Associates CC- August 2006 (Christian, 2006).

- Environmental Overview & Environmental Management Plan for Starting Right Investments Eighty (Pty) Ltd (now called Nova Energy (Africa) (Pty) Ltd). Exclusive Prospecting Licences [EPL] 3668, 3669 and 3670 – January 2007 (Speiser, 2007).

- Environmental Impact Assessment and Draft Environmental Management Plan for the Tubas Project – Softchem - October 2011 (Softchem, 2011a).

- Environmental Impact Assessment and Draft Environmental Management Plan for the INCA Project – Softchem - October 2011 (Softchem, 2011b).

- Reptile Uranium Exploration Project – EPL3498 Aussinanis – July 2007. An addendum to: Environmental Impact Assessment & Environmental Management Plan for EPL's 3496, 3497 & 3499 (Scholtz, 2007).

- Environmental Impact Assessment and Environmental Management Plan for Exploration on EPL 6820. PN Hooks May 2018 (Hooks, 2018).

In addition to the EIA and EMPs listed above, the following EMP has also been submitted.

- Environmental Management Plan – Annual Review & Update. August 2015 (RUN, 2015)

This EMP supersedes all of the previous EMPs submitted for all of the EPLs listed in Section 1.1.

1.4 Exploration Activities

1.4.1 Low Impact Exploration Programs

Low impact exploration is defined as reconnaissance, mapping and geochemical sampling. Reconnaissance and mapping have effectively zero environmental impact, allowing a 'leave only footprints, take only photographs' approach with the only samples being collected comprising rock specimens from outcrops.

Geochemical sampling comprises raking or shovelling of a few kilograms of soil or rock into a sieve to extract 0.5 to 1.0kg of a particular size fraction for chemical assay in a laboratory. Any holes dug during this sampling process are backfilled. GPS is used to locate the site, so the use of gridding or term/tag markers is no longer required.

1.4.2 Drilling Programs

The environmental impact of drilling depends on the type and depth of drilling, the type and amount of drill spoil returned to surface, the size of the drill rig and whether groundwater is encountered. The two types of drilling undertaken on the tenements are reverse circulation (**RC**) and diamond core (**DC**).

RC percussion and DC drilling are utilised when detailed drilling to depth is required to assess a mineral prospect or deposit. Drilling operations are generally confined to a relatively small area of approximately 1 to 10 hectares.

During drilling, RC samples are placed in plastic retention bags and laid in rows adjacent to the drill hole. 1 to 2kg sub-samples, also placed in plastic bags, are taken from these samples for each metre drilled. The sub-samples are transported to RMR's office premises in Swakopmund, where they are analysed at the in-house laboratory. Once the analytical work is completed, samples are transported to the Company's sample storage facility "Rocky Point" as approved by NNNP authorities. Diamond core is placed in core trays and removed from the drill site and also stored at Rocky Point.

Rehabilitation of the drill sites is required upon drill hole completion and involves back-filling of sample material into the drill hole. Any excess sample bags are collected and disposed of at a MEFT-approved disposal site.

1.5 Legal Requirements

The key environmental legislation to be considered for exploration activities includes:

- Constitution of the Republic of Namibia,1990 (Amended 1998).
- Minerals (Prospecting and Mining) Act (No 33 of 1992).
- Environmental Management Act (No 7 of 2007).
- Environmental Investment Fund of Namibia Act (No 13 of 2001).
- Atomic Energy and Radiation Protection Act (No 5 of 2005).
- Forest Act (No 12 of 2001).
- Nature Conservation Ordinance (No 4 of 1975) (as amended).
- Namibian Water Corporation Act (No 12 of 1997).
- National Heritage Act (No 27 of 2004).
- Water Act (No 54 of 1956).
- Water Resources Management Act (No 11 of 2013).

In addition to the Acts, the Namibian Government also issues associated Regulations, Policies and Bills.

Those of key relevance especially for the NNNP include:

- National Policy on Prospecting and Mining in Protected Areas (MET, MME, 2018).
- Minerals Policy of Namibia (MME, 2002).
- Namibia's Environmental Assessment Policy for Development and Environmental Conservation, 1994/1995.
- Parks and Wildlife Management Bill of 2009.

1.6 Environmental Responsibilities

RMR's Namibian office is located in Swakopmund with the holding company, DYL, located in Perth, Western Australia. The address and contact details for RMR are listed below.

Swakopmund Office	Address:	48 Hidipo Hamutenya Street PO Box 2538 Swakopmund Namibia
	Telephone:	+264 64 415 200
	Facsimile:	+264 64 405 384
	Email:	info@reptile.com.na

The following key RMR personnel are charged with the responsibilities of implementation and execution of the EMP.

- Exploration Manager.
- Safety, Health and Environmental (**SHE**) Manager.
- Safety, Health and Environmental Control Officer (**SHECO**).

1.6.1 Exploration Manager and/or Safety, Health and Environmental (SHE) Manager

RMR acknowledges its responsibilities to conduct its business in harmony with the wider community's desire to protect the natural environment. RMR carries the ultimate responsibility for all stages of the projects and the resulting environmental impacts.

The responsible persons are RMR's Exploration Manager and RMR's SHE Manager. The responsible Manager must ensure that:

- a properly qualified SHECO is appointed;
- adherence to the Environmental Management Act and the Exploration EMP are included in contractual documents with all contractors, subcontractors and consultants;
- all employees and contractors adhere to rules, requirements and standard practices of the EMP;
- RMR and all its employees, contractors, subcontractors, and consultants comply with all legislation and policies of the Namibian Government and any relevant International Conventions;
- compliance with the Environmental Management Act is enforced on a day-to-day basis;
- environmental audits are conducted periodically by suitably qualified environmental personnel to confirm that the environmental requirements are being properly understood and effectively implemented;

- a sufficient budget is provided to implement the environmental management measures; and
- open and effective communication is maintained between all parties who can influence the environmental management on the project areas.

1.6.2 Safety, Health and Environment Control Officer (SHECO)

The Company shall assign the day-to-day responsibility for environmental management to a competent and suitably qualified SHECO, for the duration of all exploration activities. The SHECO shall:

- be familiar with the contents of the EMP and communicate it to all personnel;
- monitor compliance with the EMP on a daily basis and enforce the Company's standard procedures and practices on site;
- in the event of any infringements leading to environmental damage, consult with the Exploration Manager and SHE Manager and take remedial measures to limit or rectify the damage;
- maintain a record (photographic and written) of "before-and-after" conditions on site;
- facilitate communication between all role players in the interests of effective environmental management;
- plan and mark out access routes in advance;
- undertake environmental audits of overall compliance with the Environmental Management Act and other environmental regulatory requirements;
- submit regular site inspection reports to the SHE Manager;
- advise the Exploration Manager/SHE Manager on any matters of interpretation and implementation of the Environmental Management Act, as required; and
- make recommendations for remedial action in cases of non-compliance with the Environmental Management Act and other regulatory requirements.

1.6.3 Drilling/Exploration Contractor

The Drilling/Exploration Contractor shall have the responsibility to:

- be familiar with the contents of the EMP;
- comply with the Environmental Management Act and EMP;
- notify the SHECO and/or SHE Manager in advance of any actions he has reason to believe will have significant negative impacts, so that mitigatory measures can be discussed and implemented before negative impacts arise;
- conduct environmental training amongst his employees and subcontractors so that they are fully aware of the Environmental Management Act and the EMP; and
- undertake rehabilitation measures where required by the SHE Manager and in accordance with the EMP and the Company's Procedures. As far as possible, rehabilitation measures must be carried out progressively and not left until the end of the project and/or drilling campaign.

2 EXISTING ENVIRONMENT

The Central Namib is divided into three zones: the 35 to 40km wide coastal strip, where fog is frequent; an approximately 50km wide arid zone further east; and a semi-arid eastern zone, where the desert merges into the arid savannah and the escarpment, called the Pro-Namib.

2.1 Climate

2.1.1 Weather Data Collection

RMR permanently operates a weather station on EPL3496 that records wind speed, wind direction, temperature, humidity, barometric pressure and rainfall. The compilation and analyses of the weather data was conducted as part of the Air Quality Baseline Assessment for the Tumas Project (Airshed, 2020).

2.1.2 Temperature

The Namib near the coast has a temperature range that is moderated by proximity to the sea. As distance increases from the coast the temperature range rapidly becomes more extreme.

Minimum, maximum and average temperatures recorded from November 2020 until October 2021 for the area are given as 34.9°C, 9°C and 20°C respectively, based on weather data collected from the RMR's weather station. Average maximum temperatures range from 34.9°C in April 2021 to 21.6°C in September 2021, with daily minima ranging from 24.7°C in December 2020 to 9°C in September 2021 (Table 1).

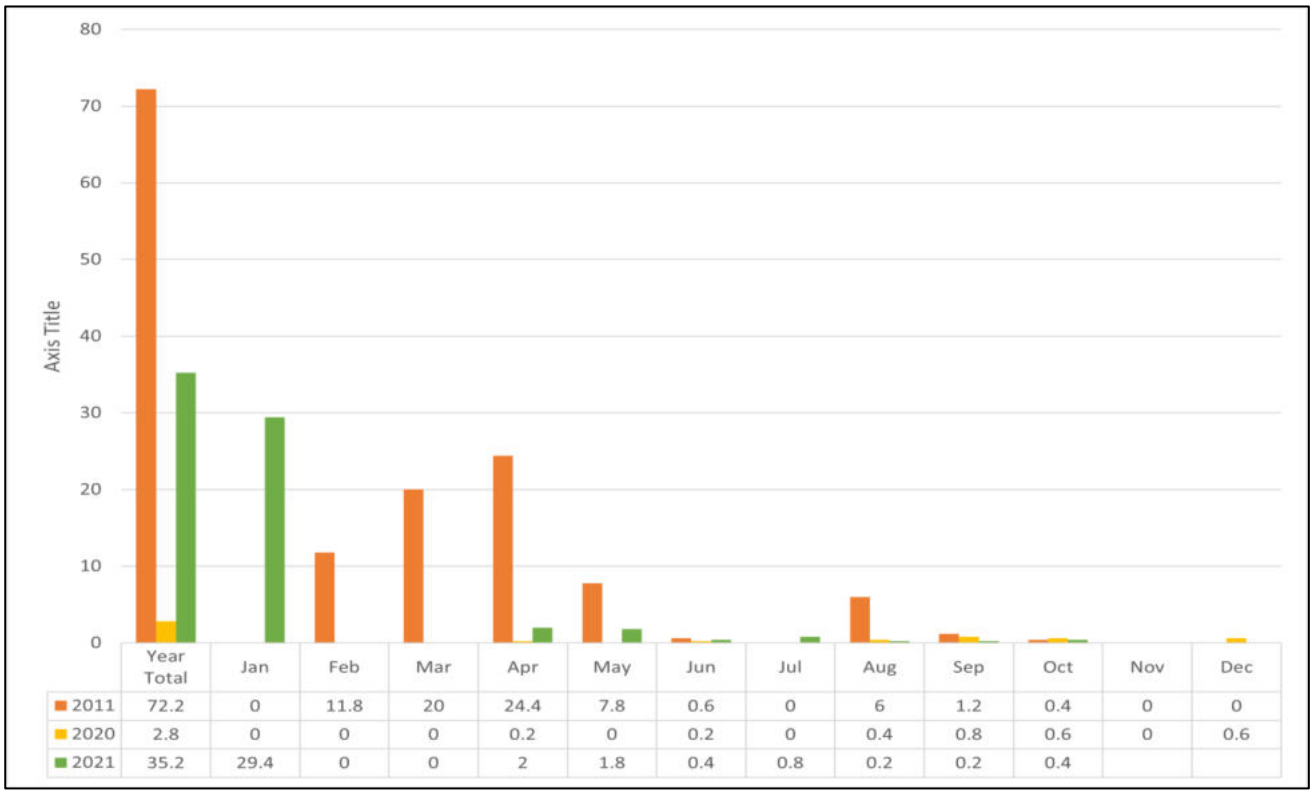
***Table 1**:Minimum, Maximum and Average Monthly Temperatures based on the RMR Weather Station data on EPL3496 (November 2020 – October 2021).*

	Year 2020		Year 2021									
Temperature (°C)	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**
Minimum	10.2	13.9	17.2	15.4	17.4	20.4	16.9	13.6	12.5	13.9	9.0	10.9
Maximum	23.2	24.7	26.9	26.6	33.7	34.9	32.1	28.9	28.1	28.4	21.6	26.2
Average	14.9	18.1	20.7	19.6	24.9	27.3	24.0	20.8	19.8	20.0	13.4	17.2

2.1.3 Precipitation

The average annual rainfall ranges from about 15mm at the coast, to about 35mm at the RMR's weather Station on EPL3496. However, rainfall is extremely variable, patchy, and unreliable and an area can go for years without any rain falling. The area receives significant amounts of moisture from fog or dew, particularly near the coast. On average, more precipitation occurs from fog than from rainfall.

Monthly average rainfall figures obtained from the weather station reflect in Figure 2. Total annual rainfall varied between 2.8mm (2020) to 35.2mm (2021) and 72.2mm (2011), where 2011 was recorded as an exceptionally high rainfall year for the region (Airshed, 2020).



	Year Total	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	72.2	0	11.8	20	24.4	7.8	0.6	0	6	1.2	0.4	0	0
2020	2.8	0	0	0	0.2	0	0.2	0	0.4	0.8	0.6	0	0.6
2021	35.2	29.4	0	0	2	1.8	0.4	0.8	0.2	0.2	0.4		

Figure 2: *Rainfall based on meteorological data from RMR's weather station on EPL3496 (January 2020 – December 2020; January 2021 – October 2021).*

2.1.4 Humidity

The average humidity for the region ranges from around 32% in June to around 58% in February (Soft Chem, 2011a).

2.1.5 Wind

Strong southerly winds prevail near the coast with westerly to south westerly winds also occurring frequently. With increasing distance from the coast, the wind speed generally decreases, and direction becomes more variable. Warm easterly winds from the interior blow for typically between 7 and 14 days per year. These "Berg winds" are hot dry winds caused by air descending from the interior, as the air descends it is compressed causing a rapid increase in temperature. These winds can cause serious sandstorms, particularly in winter and spring (Christian, 2006).

Airshed (2020) produced annual wind roses for the years 2011, 2012, 2018 and 2019 where data from RMR's weather station was available for the full calendar year (Figure 3).

During 2011 and 2012 the prevailing wind was mostly from the west whereas the 2018 and 2019 wind roses reflect a more dominant wind from the west- south west. In 2011 and 2012, the average wind speed varies between 2.8m per second (m/s) and 3.6m/s, respectively, whilst the average wind speed was higher in 2018 (3.3m/s) and 2019 (3.6m/s) (Airshed, 2020).

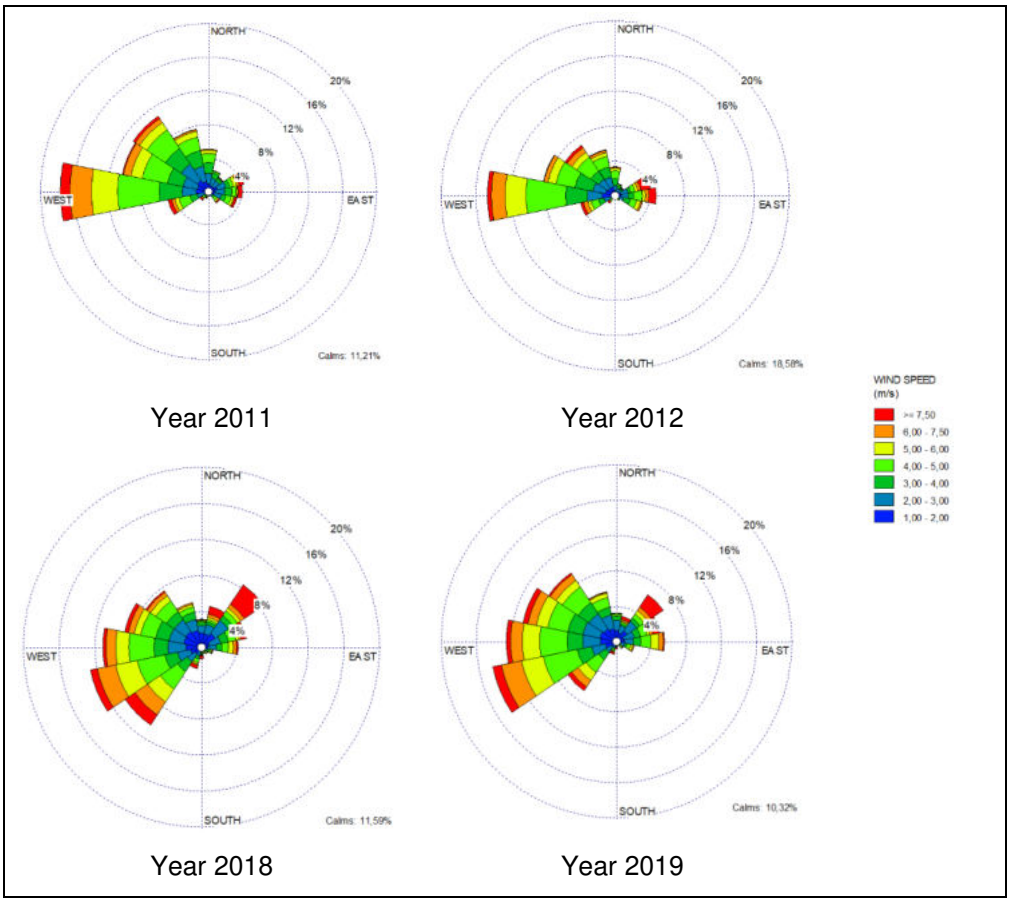


Figure 3: *Yearly wind roses based on meteorological data from RMR's weather station for the years 2011; 2012; 2018; and 2019.*

The seasonal wind roses, as shown in Figure 4, show the predominantly north-westerly winds in summer from December to February, and west-south westerly winds during autumn from March to May. High speed winds from the north-east, termed "the east winds", dominate during the winter months from June to August, while more westerly winds blow during spring from September to November (Airshed, 2020).

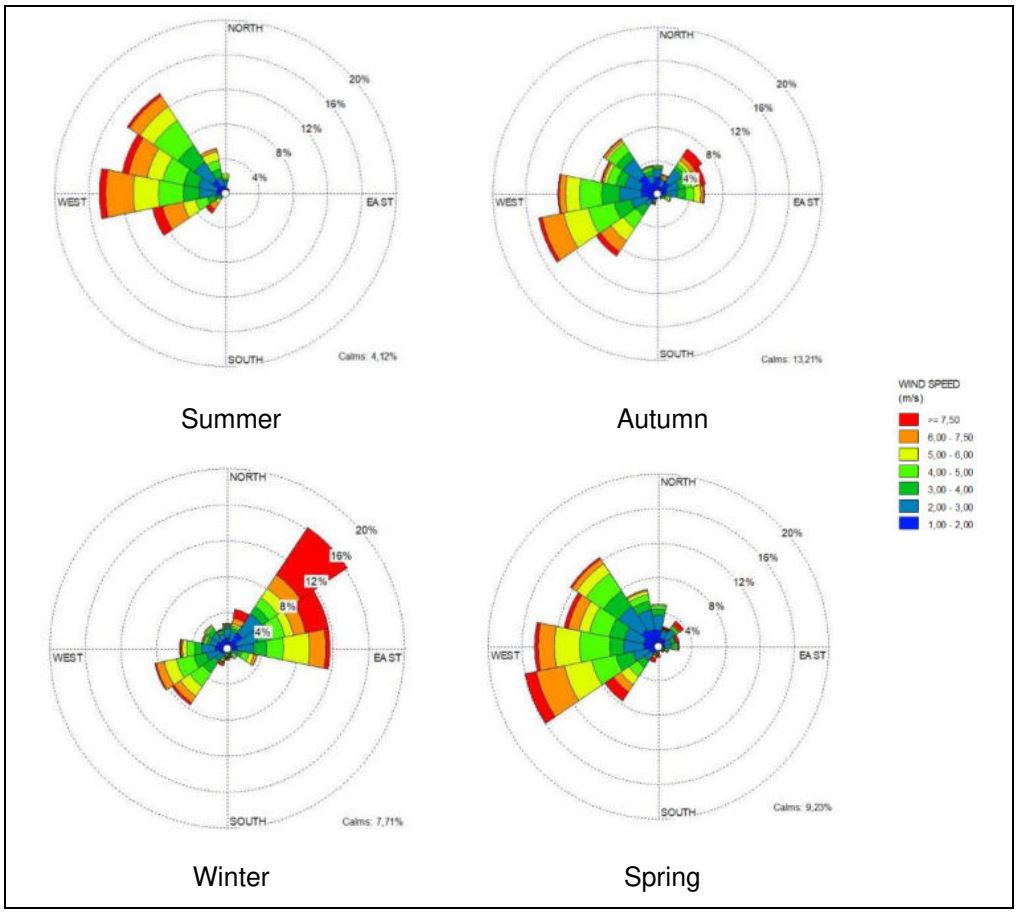


Figure 4: *Seasonal wind roses based on meteorological data from RMR's weather station for the period March 2018 to June 2020.*

2.2 Geology

The geology of the exploration areas is dominated by three rock units. The oldest unit is a basement of Late Proterozoic to Cambrian Damaran (1.0 – 0.5 Ga) gneiss, schist and marble intruded by several generations of leucogranite (also referred to as alaskite). Some of the leucogranite intrusions are enriched in uranium including the Ongolo and MS7 alaskite deposits on EPL3496. In addition, uranium enriched leucogranites probably represent the source rocks for surficial uranium mineralisation in the Tumas paleochannel located on EPLs 3496 and 3497.

The second unit comprises fluviatile sediments deposited in the palaeochannels (palaeo-valleys) of ancient river systems that flowed westwards from the Great Escarpment during Upper Cretaceous and Lower Tertiary times. These palaeochannels were incised into the metamorphic rocks of the Damaran basement. The Tumas palaeochannel is one of these ancient river systems and crosses in an east-west to southeast northwest direction. Coarse sands and conglomerates fill the palaeochannel and are collectively referred to as the Namib Group. The Namib Group unconformably overlies Damaran basement rocks.

The Namib Group sediments are up to 100m thick and commonly cemented by calcite and dolomite. Uranium mineralisation typically occurs at depths of 5 to 10m below the surface and consists exclusively of carnotite, a bright yellow uranium vanadate. Carnotite occurs interstitially along clastic grain boundaries and also filling cavities and fractures. A combination of fluvial and chemical processes over geological time spans resulted in the concentration of uranium minerals in the sediments along these ancient watercourses.

The third major unit comprises sediments of the fluviatile and sheetwash drainage of the present-day Tumas river system. These sediments overlie the palaeochannel sediments and extend well

beyond the limits of the palaeochannel. Gypsum is a feature of this unit commonly occurring at surface and extending to depths of 10m or more below the surface. This unit is rarely mineralised.

2.3 Topography

The exploration areas rise from approximately 200m above sea level in the west to approximately 700m above sea level in the east. The eastern part is dominated by low hills composed of outcropping Damaran basement rocks and a relatively narrow present-day Tumas ephemeral river. In the western part of the exploration area, the landscape is much flatter and the Tumas area expands to a wider braided river system. Deposition is the dominant fluvial process.

2.4 Soils

The soils of the Namib Desert are formed by various processes, both mechanical and chemical. The soils are generally poorly developed due to the arid environment, lack of biomass and regular wind scouring (Mansfield, 2006). Better soils with higher salt content occur along the drainage lines.

The various types of soils found in the area include gypsum soil and calcrete. Gypsum soil is believed to be formed by the reaction of hydrogen sulphide from the sea with surface limestone. Generally, the gypsum soils correspond to the area where lichens grow on gravel plains, supported by fog. Gypsum crusts and lichens are most evident at the westernmost part of the Tumas area within the coastal fog zone. Further eastwards gypcrete occurrences decrease, and calcrete becomes more dominant.

Underlying the grassy plains in parts of the region are hard substrates comprised of coarse sandy material, which is probably stabilised by carbonates but not to the extent that hard crusts are formed. These hard-sandy plains are usually covered by sharp and angular gravel. During dry years wind blows out the finer particles where there is no vegetative cover leaving the coarser gravel pieces on top of the soil.

The alluvial material in the dry riverbeds varies from coarse sand to fine powdery material that is covered by a hard crust of coarser sand. In a few of the smaller tributaries of the Tumas drainage system, there are some shallow pans comprised of finer material such as silt and clays mixed with carbonate and salts (Christian, 2006).

The larger water courses are usually comprised of coarse sand, mixed with gravel in places. In some areas the sand is compacted and hard. In other places there is a hard crust which is underlain by soft sand and powdery silt (Hooks, 2018).

2.5 Hydrology

The surficial uranium deposits in the EPLs are contained in sediments of ephemeral drainage courses and palaeochannels. Tubas, Oryx, Oryx Extension and Tumas deposits lie within the westward draining Tumas system. Other deposits may be found in similar depositional environments of the Ripnes drainage system which flows toward the Kuiseb River.

The source of uranium was a wide variety of granitic rocks that occur in the mountainous areas to the east. A combination of fluvial and chemical processes over geological time spans resulted in the concentration of uranium minerals in the sediments along these watercourses.

Erosion cycles, leading to shifts in the horizontal and vertical alignments of watercourses, resulted in the formation of old river terraces that now stand at elevations of several metres higher than the present watercourses. As evidence that these were once riverbeds, these terraces are often covered with rounded pebbles. It is these terraces which are the main target of exploration, however viable concentrations may also be found in modern watercourses.

The deposits that comprise the target areas occur in low-lying gravel plains that are generally fairly flat, except where they have been incised by rivers as described above, leaving the terraces as remnants of an earlier land surface.

The larger river courses are wide braided courses where longitudinal gradients are low, and where deposition is the dominant fluvial process. The alluvial material in the dry riverbeds varies from coarse sand to fine powdery material which is covered by a hard crust of coarser sand. The crust is weakly consolidated by carbonates and gypsum due wetting and drying in this high evaporation environment. The crust is easily broken by vehicles and the softer underlying material is easily churned up. The depth of sand decreases in the case of smaller watercourses. The smallest and shortest, first order drainage lines that dissect the terraces are relatively steep and erosion rather than deposition is the dominant fluvial process here.

2.6 Hydrogeology

A groundwater monitoring program commenced in three areas within EPL3496 in 2010. The depth to groundwater in the bores ranged widely from 24 to 97m. Analysis of the groundwater samples indicated that the groundwater quality is characterised by high salinities and is predominantly a sodium-chloride water type. Total dissolved solids (TDS) ranged from 7,056mg/L to 43,508mg/L making, under the Namibian Water Guidelines, the groundwater unsuitable for human consumption (Eco Aqua, 2010).

In March 2020, an additional 14 groundwater monitoring boreholes were installed along the Tumas palaeochannel within EPLs 3496 and 3497. Eleven of these boreholes intersected the Tumas and Tubas palaeochannel aquifer of Namib Group. Three of the boreholes intersected hard rock aquifers, comprising marble, mica-schist and granite of the Damara Supergroup. The water level in the 14 bores ranged from 7m to 36m below base level (SLR, 2020).

Groundwater from the 20 boreholes were sampled in June 2020 and analysed for major ions and metals. The salinity (TDS) of the groundwater ranged between 3,279 and 46,198mg/L. The uranium concentrations ranged between 23µg/L and 166µg/L (SLR, 2020).

2.7 Vegetation and Flora

2.7.1 Vegetation

The Central Namib along the west coast of Namibia is contained in the Desert Biome and geographically covers the area between the Kuiseb River in the south and the Huab River in the north.

Plants in hot deserts face severe physiological stress from drought and heat. The availability of moisture is unpredictable and therefore vegetation is sparse and often patchy (Ekotrust, 2013a, b). The vegetation of the Namib Desert developed under harsh conditions and although plant species are well-adapted, the vegetation remains vulnerable to operational disturbance. Vegetation patches provide food and shelter, as well as migration corridors for small mammals, reptiles, and insects.

Several vegetation and flora surveys have been conducted on RMR's tenements. A survey of the Inca, Tubas areas, undertaken in 2010, identified ten vegetation communities which were:

1. *Searsia marlothi- Sarcostemma viminale* sparse shrubveld of granite inselbergs.
2. *Aloe asperifolia – Hoodia cf currorii* sparse shrubveld of rocky outcrops and schist ridges.
3. *Zygophyllum stapffii- Brownanthus sp*. sparse shrubveld of rocky ridges and "hardeveld" along drainage lines.
4. *Acanthosicyos horridus – Pechuel-Loeschea leubnitziae* riverbeds and washes
5. *Arthraerua leubnitziae – Zygophyllum stapffii* dwarf shrubland of the gravel plains and washes:
    a. *Arthraerua leubnitziae - Salsola tuberculata-Gomphocarpus filiformis* dwarf shrubland of the gravel plains and sheetwashes;

b. *Arthraerua leubnitziae - Salsola tuberculate- Stipagrostis* obtuse sparse shrubveld of the gravel plains; and
c. *Arthraerua leubnitziae-rullus ecirrhosus* sparse shrubland of gravel plains and sheetwashes.

6. *Arthraerua leubnitziae- welwitscia mirabillis* sparse dwarf shrubland of the northern gravel plains and sheetwashes.
7. *Zygophyllum stapffii- Arthraerua leubnitziae* dwarf shrubland of the gravel plains.
8. *Salsola tuberculate* shrubland of river terraces and undulating plains and footslopes.
9. *Arthraerua leubnitziae* rocky ridges and dolerite dykes.
10. Barren gravel plains.

Another vegetation and flora survey around the Tumas area was undertaken in 2013 (Ekotrust, 2013a) and the Tumas/Tubas area in 2020 (EnviroScience, 2020). In the 2020 survey, twelve landforms for vegetation communities were delineated, which were divided into the broad categories plains, rivers, inselbergs and mountains.

2.7.2 Flora

A number of rare, protected and endemic plant species have been identified in the surveys conducted on the tenements. These include *Welwitschia mirabilis, Hoodia currorii, Acacia erioloba, Acanthosicyos horridus, Aloe asperifolia, Arthraerua leubnitziae, Capparis hereroensis, Commiphora saxicola* and *Euphorbia lignosa*.

No Red Data plant species were recorded during the 2010 survey of the Inca, Tubas and Shiyela areas. Six species were recorded that are protected under the Namibian Forest Act, 2001; three species under the Namibia Nature Conservation Ordinance, 1975, and six species are listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Two restricted-endemic, seven endemic and twelve near-endemic plant species were also recorded during the 2010 survey.

A total of 91 plant species were identified during the surveys conducted in the Tumas area in 2013 (Ekotrust, 2013a) of which 11 were tree and/or shrub species, 13 dwarf shrub species, 17 succulent species, 37 forb species and 13 grass species. Thirteen Namibian endemic species were identified during the survey (14% of the total number of species recorded), and 12 species have some form of protection.

A field survey was conducted in the Tumas/Tubas area in 2020. The study identified 201 species that could be present in the region, with 92 of those species confirmed as present in the 2013 and 2020 surveys. These include 22 legally protected species, 46 range-restricted species (endemic or near-endemic) and one listed "vulnerable" according to red-list criteria. All trees in the study area are protected, and so are the nara plant (*Acanthosicyos horridus*), *Welwitschia mirabilis* and all succulents. Four plant species that deserve particular attention are the nara plant (*Acanthosicyos horridus*), the stone plant (*Lithops ruschiorum*), the hummock-forming *Salsola cf. swakopmundii* and *Welwitschia mirabilis*.

2.7.2.1 Welwitschia mirabilis

The Welwitschia mirabilis seeds germinate only after heavy rain occurs over a number of days. These conditions rarely occur in the desert and therefore recruitment is episodic with some colonies being of the same age. Seedlings are dependent on fog to survive the dry times, however, the plants are dependent on rainfall also. This plant is able to absorb fog water, which condenses on the leaf surface and is channelled to the base of the stem.

The primary root is strong and wedge-shaped and up to 3m long. Most thin secondary roots are found just below the surface where they collect dew in the early mornings. Driving close to plants may therefore damage these roots and compromise the survival of the plant. The plant is fairly easy to cultivate by simulating its native environment, although regular watering and fungal control is a

prerequisite. It was found that transplanting of seedlings under cultivation can be done without much mortality.

2.8 Fauna

The most important habitats to be avoided by prospecting and mining operations (where possible) are the ridges, inselbergs and valley slopes, large ephemeral rivers, coastal wetlands, springs and ephemeral pans, caves and isolated sand patches and dunes (Ekotrust, 2013a,b). The ridges, outcrops and inselbergs are generally viewed as unique habitats for vertebrate fauna (Cunningham 2013). Various geckos and rock- and crevasse-dwelling species are also associated with these landforms. The drainage lines throughout the Ongolo and Tumas area are mostly tributaries of the ephemeral Tumas River, which drains the general area westwards towards the coast. These drainage lines are the lifelines for most vertebrate fauna, especially ungulates that forage along these vegetated drainage lines (Cunningham 2013).

Fauna surveys were conducted on RMR's tenements in 2010 and 2013 (Cunningham, 2010; 2013; Irish and Scholtz, 2010) with the latest survey conducted in 2020 on the Tumas/Tubas area (Cunningham, 2020). The results of the surveys are summarised below with a focus on the 2020 survey findings.

The general Swakopmund area is regarded as "low" in overall (all terrestrial species) diversity while the overall terrestrial endemism on the other hand is "moderate to high" (Mendelsohn et al. 2002). According to the literature survey an estimated 54 reptile, 5 amphibian, 49 mammal and 130 bird species (breeding residents) are known to or expected to occur in the general Tumas area of which a high proportion are endemics (Cunningham, 2020).

During the 2020 field survey, six species of reptiles were confirmed through direct observations at various locations throughout the Tumas and Tubas area. Of the six species confirmed from the area, four species are classified as endemic albeit secure (Branch 1998, Griffin 2003) (Cunningham, 2020).

Twelve species of mammals were confirmed through direct observations at various locations in the Tumas and Tubas area in 2020. Two species are classified as endemic, one species a specially protected game, one species as protected game, and three species as vulnerable under Namibian Environmental Information Service (Griffin and Coetzee 2005). Some species have more than one classification. The IUCN Red List of Threatened Species (2020) classify one species each as vulnerable and near threatened while two species as listed by Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).

During fieldwork undertaken in 2020, 13 species of birds were confirmed through direct observations in the Tumas area. Of these, two species are classified as endemic (Simmons 1998) and one species as vulnerable (Simmons et al. 2015) from Namibia; one species is classified as endangered by the IUCN (2020) while three species are classified as near-endemic to southern Africa (Hockey et al. 2006). Some species have more than one classification.

2.9 Air Quality

Baseline air quality conditions were determined for the broader Erongo Region as part of the Strategic Environmental Assessment (SEA) for the Region (MME, 2010). The predicted background concentrations drawn from the 2010 SEA for the highest-level daily average PM_{10} concentration were around 180 µg/m^3 in the Tumas area, with an annual average of 40µg/m^3.

An Air Quality Baseline Assessment of the Tumas and Tubas area was undertaken in August 2020 (Airshed, 2020).

Airshed (2020) concluded that concentrations at Jakalswater station are regarded the best indicator of likely levels in the area. The results of the analyses of the PM_{10} data for the period November 2016 to December 2018 showed the following:

- PM_{10} concentrations recorded at Jakalswater, exceeded the limit of 75µg/m³ for five days in 2017 and six days in 2018.

- The highest daily PM_{10} concentration recorded of 160µg/m was during low wind speed (3.6m/s) and were likely from local dust generating activities.

- Annual average PM_{10} concentrations were 21µg/m³ during 2017 and 25µg/m³ during 2018, falling within the annual limit of 40µg/m³.

- Hourly average PM_{10} concentrations were wind dependent and from the south-southwest with lower concentrations from the northeast. Daily average concentrations were from wind dependent sources (windblown dust but at lower concentrations) from the northeast.

- Dust sources to the north-east would most likely be the main contributing sources to the Tumas area.

2.10 Noise

A baseline noise survey was completed in 2010 around the Tubas area (Cornelissen, 2010). Weighted sound pressure levels were recorded over an hour during different time periods over five days. The median values of the measurements recorded varied between 31.6dBA and 65.6dBA.

A baseline noise survey was also conducted in the Tumas/Tubas area in 2021 (Soundscape, 2021). The results showed that the impulse corrected A-weighted equivalent sound pressure levels (L_{Aleq}) ranged between 36.5dBA and 56.1dBA, and as such comparable to what was measured during daytime in 2010.

2.11 Environmentally Sensitive Areas

The sensitivity of the central Namib is mostly associated with low precipitation and the consequent slow natural rehabilitation rate. The recovery rate of desert soil structures appears to be dependent on many factors. Studies of ghost towns and dated disturbances in the Mojave Desert, California, indicate that recovery from soil compaction, in terms of soil strength and infiltration, may require 70 to 680 years (Belnap & Warren, 2002). Desert areas disturbed by human activities may take centuries to recover without active intervention. Furthermore, desert soils are poorly developed and environmental factors such as frequent strong winds contribute to the amplification of impacts associated with human activities, such as vehicle tracks (SKEP, 2001) (RUN, 2015).

The main ecosystems within the EPLs include sand dunes in the south, gravel plains, drainage lines, and rocky outcrops, which form special habitats for desert adapted animal-and plant species.

2.12 Radiological Environment

The contribution of terrestrial sources to the natural background radiation in the Erongo Region was obtained from the assessment of airborne radiometric surveys. This resulted in an estimated dose rate of between close to zero and up to 7.3mSv.a^{-1} with a regional average of 0.7mSv.a^{-1}.

A radiological study in 2010 for the Omahola area on EPL3496 found that the natural terrestrial gamma radiation was higher than the average for the Erongo Region, with the enhanced levels corresponding to the presence of uranium deposits. The airborne radon concentrations observed during the radon assessment range from 1.57Bq.m^{-3} to 62.5Bq.m^{-3} with an average activity concentration of 20.58Bq.m^{-3} (VO, 2010).

The contribution from radioactive dust to the natural background radiation field was re-assessed as part of the update of the Strategic Environmental Management Plan (SEMP) for the Erongo Region (MME, 2019). The updated SEMP reported that the average exposure dose as a result of the inhalation of environmental dust amounts to 0.003mSv.a^{-1} [MME, 2019] (VO, 2020).

The concentration of radon in select locations within the Erongo Region was measured in a regional radon monitoring program conducted as part of the SEMP re-assessment (MME, 2019). This update report found that the exposure dose due to the inhalation of ambient atmospheric radon and its progeny is location-specific and ranges between some 0.1mSv.a^{-1} and 0.4mSv.a^{-1} [MME, 2019] (VO, 2020).

Baseline exposure doses in the Tumas area were estimated as part of the 2020 Radiological Baseline Assessment (VO, 2020). These comprised:

- a total direct external gamma exposure does of 1.1+/- 0.4mSv.a^{-1};
- an inhalation does due to radon and progeny of 0.2 +/- 0.1mSv.a^{-1}; and
- an inhalation does due to ambient atmospheric dust of 0.0003mSv.a^{1}.

Several studies have been conducted to establish the ambient groundwater quality in the Erongo Region as part of the SEA (MME, 2010). However, the potential radiological dose from the radioactivity in the groundwater was not calculated. Kringel et al. (2010) found that uranium was a common trace element in the water samples collected from the Kahn and Swakop rivers. With natural background concentrations of uranium in the alluvial groundwater ranging between 2µg/L and 528µg/L and having a mean of 39µg/L . Radon concentrations in groundwater were also determined and found to be between 0.5Bq/L and 28Bq/L.

2.13 Heritage and Archaeological Sites

Archaeological sites are scattered throughout the Namib. These may be associated with places that provide shelter or water. Stone circles used as hunting blinds by the San people may also be found.

An archaeological survey of EPL3496 was conducted in 2010 (Kinahan, 2010). It was focused on the Tubas River and environs, identified 39 archaeological sites ranging in age from the late Pleistocene to recent. The area is of generally low archaeological significance, but some sites may require some special protection (Kinahan, 2010).

A survey conducted in 2013 of the Ongolo/Tumas area on EPL3496 located 45 archaeological sites ranging in age from the late Pleistocene to recent or historical age (Kinahan, 2013).

3 GENERAL ENVIRONMENTAL MANAGEMENT

3.1 Environmental Policy

The EMP complies with the Environmental Policy of RMR's Australian-based parent company, Deep Yellow Limited (**DYL**). The DYL Group Environmental Policy is presented below.

Deep Yellow LIMITED

Environmental Policy

Contents

Applicability

A reference to **Deep Yellow** in this policy is a reference to:

a. Deep Yellow Limited ABN 97 006 391 948 (**Company**) and each of its subsidiaries (together the **Group**); and
b. any joint ventures under a Group company's operational control.

This policy applies to all directors, officers, employees, consultants and contractors of Deep Yellow (**Personnel**).

This policy also applies, as far as is reasonably achievable, to Deep Yellow's service providers, suppliers and third-party contractors (**Third Parties**).

All Personnel and applicable Third Parties will be provided with access to a copy of this policy via the Company's website. Training or awareness sessions on this policy will be held from time to time, as required.

Purpose and objectives

Deep Yellow is committed to ensuring that there is effective environmental management across all aspects of its operations.

The purpose of this policy is to provide a framework for Deep Yellow to achieve a high level of environmental performance across Deep Yellow's operations.

Strategy

Deep Yellow will meet the objectives of this policy by:

a. complying with applicable environmental laws, regulations, codes, corporate and industry standards and other legal and contractual requirements;
b. identifying, assessing and managing all environmental risks and impacts related to its operations;
c. striving to implement industry practices and environmental management systems at all levels, including exploration, development, operations, decommissioning, closure and rehabilitation;
d. preventing and mitigating pollution from its operations;
e. regularly reviewing environmental performance;
f. reporting environmental performance transparently;
g. establishing grievance mechanisms for all stakeholders where environmental complaints can be received and addressed; and
h. ensuring all Personnel are aware of this policy and their environmental related responsibilities, and increasing their awareness on the potential environmental impacts of Deep Yellow's operations, and how those impacts can be minimised.

Responsibilities

CEO

The Managing Director/Chief Executive Officer of the Company (**CEO**) is accountable to the Company's board of directors (**Board**) for ensuring this policy is effectively implemented.

Personnel

Personnel have the shared responsibility to:

a. Work in compliance with the project environmental conditions as communicated through the site induction, and ongoing communications from Deep Yellow management.
b. Support their respective managers and supervisors (as appropriate) in the continual improvement of project environmental performance.
c. Communicate any environmental incidents to management.

Review

The Board will review this policy at least annually and update it as required.

Date adopted	29 June 2017
Last amendment	
Last review	23 June 2021

3.2 Environmental Management System

DYL and RMR ascribe to the fundamental principles of AS/NZS ISO 14000 Environmental Management System (EMS). The international EMS standard is based on the methodology known as plan-do-check-act which can be briefly described as follows:

Plan: establish the objectives and processes necessary to deliver results in accordance with the Company's environmental policy.
Do: implement the processes.
Check: monitor and measure processes against environmental policy, objectives, targets, legal and other requirements, and report the results.
Act: take actions to continually improve performance of the environmental management system.

3.3 Environmental Management Principles

The following broad objectives are to be upheld by all parties involved in RMR's activities:

(a) RMR is required to conduct all its activities in a manner that is environmentally and socially responsible. This includes all its employees, consultants, contractors, subcontractors, transport drivers, guests and anyone who enters the EPL area in connection with the project.

(b) *Health, Safety and Social Wellbeing*
- Safeguard the health and safety of project personnel and the public against potential impacts of the project. This includes issues of road safety, precautions against natural dangers on site, and radiation hazards.
- Promote good relationships with the Park's Authorities and their staff.

(c) *Biophysical Environment*
- Wise use and conservation of environmental resources, giving due consideration to the use of resources by present and future generations.
- Prevention or minimisation of environmental impacts.
- Prevention of pollution of air, water, and soil.
- Conservation of biodiversity.
- Due respect for the purpose and sanctity of the Park.

To achieve the above objectives, the following principles will be applied:

1 *Commitment and Accountability*
Senior executives and line managers shall be held responsible and accountable for:
- Health and safety of site personnel while on duty, including while traveling to and from site in Company vehicles.
- Environmental impacts caused by exploration activities, or by personnel engaged in the exploration activities, including any recreational activities carried out by personnel in the Park.

2 *Competence*
- The competence of the workforce shall be ensured through selection, training, and awareness in all safety, health and environmental matters.

3 *Risk Assessment, Prevention and Control*
- Identify, assess and prioritise potential environmental risks.
- Prevent or minimise priority risks through careful planning and design, allocation of financial resources, management and workplace procedures.
- Intervene promptly in the event of adverse impacts arising.

4 *Performance and Evaluation*

- Set appropriate objectives and performance indicators.
- Comply with all laws, regulations, policies and the Environmental Management Act.
- Implement regular monitoring and report on compliance with these requirements.

5 *Stakeholder Consultation*
- Create and maintain opportunities for constructive consultations with employees, authorities and other interested or affected parties.
- Seek to achieve open exchange of information and mutual understanding in matters of common concern.

6 *Continual Improvement*
- Through continual evaluation, feedback and innovation, seek to improve performance with regard to social health and wellbeing and environmental management throughout the lifespan of the project.

7 *Financial Provisions for Exploration*
- The Company will make the necessary financial provision for compliance with the Environmental Management Plan.

3.4 Environmental Risk

Environmental risk is considered as part of DYL and RMR's overall risk management process. Environmental risks are identified and ranked and placed on the DYL risk register. A risk assessment is conducted on an annual basis and the risk register revised accordingly.

3.5 Inductions and Training

All new employees and contractors to RMR sites or properties are required to undergo an induction that details the environmental issues and requirements of the area with an annual refresher commencing during the first quarter of each New Year.

Toolbox meetings are held regularly and may be called at any time by any employee to discuss any environmental concerns.

3.6 Communication

The importance of open communication between all parties is emphasised as the attainment of environmental quality requires a joint effort. Only with open communication can a proactive approach be achieved. This approach should ensure that environmental impacts are anticipated and prevented or minimised

3.7 Incident Reporting

Exploration employees and contractors are required to report all environmental incidents. These include, but are not limited to:

- spills of hydrocarbons, chemicals and any other potentially damaging substance greater than one litre; and
- injury to, or deaths of, native fauna caused by exploration activity (including light vehicles).
- reporting of unauthorised movements to the Park Authorities.

Incident reporting forms are available on site for recording and documentation of all environmental, health and safety incidents or issues that may arise.

3.8 Monitoring

Exploration environmental performance is monitored through:

- monitoring, compliance and review of the EMP;
- inspection of drill sites following the completion of rehabilitation;
- monthly monitoring of Welwitschia plants near the Inca prospect on EPL3496;
- monthly data collection at RMR's weather station on EPL3496;
- monthly measuring of groundwater levels in monitoring boreholes; and
- quarterly groundwater sampling on EPL3496 and EPL3497.

3.9 Inspections and Audits

Routine field inspections are undertaken weekly by RMR's SHECO to check on disturbance.

Drill sites and any other rehabilitated areas are inspected and photographed upon completion of drilling. Forms are completed as sites are monitored and checks are made for rubbish, hydrocarbon spills, leaks and weeds. After successful rehabilitation of an area and/or drill sites, the NNNP Warden is informed for inspection and sign-off.

3.10 Records and Reporting

RMR keeps soft and hard copies of all exploration applications and subsequent approvals. Digital copies of completed environmental audits, reporting and incident forms once investigation is completed) are kept for future reference.

Bi-Annual environmental reports are prepared for each EPL and submitted to MEFT.

4 ENVIRONMENTAL MANAGEMENT ACTION PLAN

RMR recognises that environmental management is an integral part of exploration programs and activities. Careful environmental planning and the implementation of appropriate management measures help to minimise the potential environmental impacts attributed to exploration activities and will assist in the successful rehabilitation of the disturbed areas.

A summary of the Environmental Management Actions is presented in Table 2.

***Table 2**: Environmental management actions.*

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
FLORA AND VEGETATION			
Disturbance of vegetation due to: • Clearing • Drilling • Changes to surface water drainage patterns • Changes in the quality of groundwater • Increased dust • Fire	To minimise the area of disturbance, avoid known priority flora locations and to ensure effective progressive rehabilitation.	• The location of camp sites, if required, to be selected with environmental considerations in mind and must be approved by the SHEM and NNNP authorities. • Use old and existing tracks where possible and minimise the number of new tracks constructed. Only single tracks be used to and from each destination. Turning tracks also to be selected. • Selected tracks to be marked with painted stakes driven into the ground. • No tracks to be cleared until approval obtained from the SHEM and NNNP. • Minimise the area cleared for each access track to only that required for safe access. • Avoid clearing established trees when constructing access tracks and drill pads. • Avoid disturbance to flora species of high conservation. • Avoid damage to lichens. • Avoid driving, walking on or near plants with high conservation status. • No removal of protected plants or parts of plants. • Access elevated sites or sites away from tracks by foot. • Limit the size of the drill pad to only that required for the safe and efficient operation of the drill rig.	Photographic monitoring of drill sites is conducted during inspection of drill holes and after rehabilitation. Photographs of drill lines are taken to observe the rehabilitation. Record and any rare flora species identified in the field and report to the NNNP authorities. Inspection of drill sites after rehabilitation is completed. Record background radiation of drill sites before drilling and after rehabilitation. Monitor rehabilitation progress.

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
		• Avoid clearing of drill pads, where it is possible to obtain an even and safe surface without clearing and soil stripping. • Cleared vegetation and topsoil should be stockpiled to be used later in rehabilitation. • Rehabilitate the disturbed area as soon as practicable. • Drill holes to be retained are to be cased, capped and GPS identified. • Backfill the drill holes no longer required with mineralised sample material. Excess sample material to be disposed of at MEFT-approved disposal site. • Sampling pits to be backfilled as soon as practical and compacted in layers so that the unwanted material will fit back in the pit. • Use of low-impact fat-tyre bicycles (instead of high-impact 4 X 4 vehicles when undertaking ground surveys. • No recreational driving permitted on the lease areas. • Educate all personnel in relation to fire management. • No open fires on the lease areas. • Extinguish any accidental fires. • No collecting of firewood from the lease areas.	
Invasive Plants (Weeds) Introduction of weeds not already in area. Spread of weeds already in	To minimise the risk of weeds being introduced to or spread from exploration activities.	• All vehicles and machinery are to be adequately cleaned/washed down before entering a new area. • Materials such as seeds, sand and stone are only to be imported from a source that is free of alien invasive	

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
area. Invasion of rehabilitated areas by weed species.		plants.	
FAUNA			
Loss of habitat due to ground disturbance. Hydrological changes, i.e., disturbance of locally important areas such as waterholes. Fauna becoming trapped in uncapped drill holes and drill sumps. Loss of fauna due to fires. Increased feral animals due to increased availability of food and water.	The main objective for fauna management is to ensure the diversity of fauna is maintained and to minimise disturbance to habitats wherever possible.	• Minimise disturbance to vegetation. • No capturing, killing or harming of fauna. • No disturbance to bird nest sites, particularly birds of prey. • No killing or attempting to handle snakes or dangerous animals. • No domestic animals allowed on site. • Prohibiting firearms on site. • Educating people on the importance of not killing or disturbing wildlife. • Limiting vehicle speed on the tenement tracks to reduce the potential of road kills. • Capping of open drill holes, immediately following drilling. • Managing refuse to prevent attraction to feral animals. • Prohibit open fires and educate personnel on the correct discarding of cigarette butts. • Implementing a fire prevention program.	Record and report all injuries and deaths of animals related to the exploration activities. Record and report any rare fauna species observed to the NNNP authorities. Record and report sightings of unknown tracks, people movement and poaching incidents to the NNNP. Satellite tracking of vehicles.
DUST			
Inhalation of excessive and/or radioactive dust.	To ensure that dust generated from exploration activities is minimised and does not cause contamination of the	• Limit vehicle traffic on access tracks, wherever possible. • Limit vehicle speed on tenement tracks to avoid excessive dust generation.	Environmental dust monitoring. Satellite-tracking of vehicles.

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
	environment.	• Minimise vegetation clearing wherever possible.	Check for contamination and clearance of drill rigs before leaving site.
TOPSOIL AND EROSION			
Clearing or disturbance of vegetation, changes to surface drainage patterns (including impediment to sheet flow), traffic and general disturbance to soil surface may render areas susceptible to erosion.	To minimise soil erosion caused by exploration activities.	• Strip and stockpile topsoil. • Minimise the area of land disturbed for the exploration activities thereby reducing the potential for erosion. • Identify and avoid disturbing areas with high erosion potential. • Position tracks along the flat contour and avoid steep gradients such as terrace shoulders. • Tyre pressure of vehicles to be kept as low as possible without compromising the safety of people. • Consider drainage patterns when establishing drill pads and tracks. Rehabilitate disturbed areas as soon as practicable.	
SURFACE WATER			
Localised modification in the direction of surface water flow; Potential impact on downstream water quality due to: • Increased siltation. • Spillages of hydrocarbons and chemicals.	To minimise adverse impacts of exploration activities on surface water within and downstream of exploration areas.	• Maintain and/or limit disturbance to existing surface water drainage patterns. • Prompt rehabilitation of access tracks crossing drainage lines following significant rainfall events. • Minimise cleared areas to reduce sources of sedimentation and implement rehabilitation measures as soon as possible following disturbance. • Ensure that fuel and chemicals are stored and transported in an appropriate manner. • Prompt clean-up and reporting of spills.	

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
GROUNDWATER			
Potential of contamination of groundwater as a result of exploration activities. Groundwater abstraction lowers ground water levels.	To ensure exploration activities do not impact on groundwater resources and/or lead to the contamination of ground water.	• All chemicals and additives used and circulated down the hole in the drilling process must be biodegradable. • Fuel and chemicals are to be stored and transported in an appropriate manner. • Prompt clean-up and reporting of spills. • Any boreholes used for water abstraction to comply with the permitting requirements of the Ministry of Agriculture, Water and Land Reform. • Manage groundwater abstraction at approved and licenced rates.	Groundwater monitoring including water levels and analysis for major ions, metals and radionuclides.
FIRE			
Destruction or damage of natural ecosystems, property and fauna as a result of bushfire. Risk or injury or death of personnel as a result of bushfire.	Minimise the likelihood of bushfires starting as a result of exploration activities.	• Educate all personnel working at RMR in relation to fire management. • External firefighting training for employees and contractors. • No fires to be lit on the lease areas. • No cigarette butts to be discarded into the environment. • Extinguish any accidental fires. • Ensure all vehicles and drill rigs are equipped with fire extinguishers to contain any fires.	
WASTE			
Exploration activities will generate the following types of waste:	Ensure that any solid or liquid waste generated from exploration activities is managed and disposed of in	• All exploration areas to be kept clean, neat and tidy. • Bins to be provided at the exploration sites and secured against wind and animal access.	

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
• General refuse, including organic material, scrap metal, cardboard and plastics. • Hydrocarbon waste such as oil, oily rags, diesel and rubber. • Non-toxic, biodegradable drilling materials (e.g. drilling mud).	an environmentally sensitive manner.	• No waste to be buried or burnt on site. • No natural waste (fruit/vegetable peels) to be discarded. • No cigarette butts or toilet paper to be left/buried at the sites. • Prevent sample bags or other plastic bags to be blown away. • All waste to be removed and taken to an approved waste disposal facility in Swakopmund or Walvis Bay. • Waste oils, solvents and other chemicals/hydrocarbons are to be stored in a bunded area prior to removal offsite to an approved disposal location.	
Exploration activities will generate NORM contaminated wastes including: • Sample bags. • Disposable PPE. • Drill site rubbish.	Ensure that any NORM contaminated waste is managed in accordance with the RMP and regulatory requirements.	Drill holes are backfilled immediately upon completion with mineralised samples to be used first. • Any excess sample material that cannot be placed in drill holes is collected from the drill site and brought to a designated collection point on the EPL. • The bags are placed in hired skip bins, which are collected and taken to an MEFT-approved disposal site. • Used sample bags from the laboratory and drill sites are monitored for radioactive contamination levels prior to be delivered for recycling as domestic waste at an approved recycle depot.	
RADIATION – Environmental Contamination			
Radioactive contamination of soils, surface water and groundwater from drilling activities.	Ensure that all activities conform to the ALARA principle.	• The Radiation Safety Officer (RSO) ensures that the Radiation Management Plan (RMP) is followed during all exploration activities. • The RSO monitors gamma radiation at drill sites prior to drilling and after rehabilitation.	

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
		• Radiation level data are recorded.	
HYDROCARBONS AND HAZARDOUS SUBSTANCES			
Contamination of soil, surface water and ground water as a result of spillage.	Ensure hydrocarbons and hazardous substances are used, stored and transported in a manner which prevents environmental harm.	• Ensure that the transport of hydrocarbons and hazardous substances is undertaken according to all relevant legal requirements and codes. • All containers of fuel, oil and other hazardous substances to be kept in clearly labelled sealed containers. • No 200L fuel drums allowed to be stored on site. • All hazardous substances to be stored in bunded areas and monitored for leaks. • Drip trays/plastic sheeting to be placed under vehicles and equipment to control potential oil leaks. • Contain and clean up hydrocarbon or hazardous materials spills. • Contaminated soil to be bagged up or isolated and removed from site for disposal at an authorised facility following authorisation of the SHECO. • Ensure that no fuels, oils, lubricants or other contaminants enters waterways. • Material Safety Data Sheet records to be maintained for all hydrocarbons and chemicals entering site. • Constructing sumps at drill sites, where necessary, to contain any spillage from drilling equipment. • Collecting and storing waste oil in suitable drums within a bunded area prior to it being removed off site for disposal at an approved facility.	Regular inspection of drill sites. Reporting of oil spills.

Environmental Issue	Management Objective	Environmental Management Controls	Monitoring/Reporting (if applicable)
ARCHAEOLOGICAL AND HERITAGE			
Disturbance of Archaeological/Heritage sites as a result of exploration activities.	Ensure that archaeological and heritage sites are not impacted as a result of exploration activities.	• Avoid disturbance to known archaeological sites. • Install "Do Not Enter" signs.	
REHABILITATION			
Disturbance to existing environment as a result of exploration activities at the site.	The main objective for rehabilitation is to return the area back to resemble the pre-disturbance landscape that is stable and self-sustaining over time.	**Access Tracks** • Once drilling is completed in an area and confirmed by the Exploration Manager, commence track rehabilitation using rakes and brooms. • SHECO to inspect the rehabilitated tracks before contacting NNNP's authorities for final inspection and sign-off. **Drill Pads** • Upon completion of a drill holes, remove all rubbish from the site. Drilling contractors are responsible for removing all drilling generated waste. • Drilling contractor to clean up any fuel, oil/hydraulic oil spills and remediate the area. • Backfill all drill holes with sample material. Mineralised sample material is to be used first. • Collect any bags with excess sample material that cannot be backfilled and dispose of at an MEFT-approved disposal site. • SHECO to inspect drill sites for possible waste, hydrocarbon spills and open holes once drill site rehabilitation is completed. **Sumps** • Sumps to be backfilled with topsoil.	SHECO to inspect rehabilitated drill sites and tracks, and monitor rehabilitation progress.

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5.2 Acronyms and Abbreviations

Cites	Convention on International Trade in Endangered Species of Wild Fauna
DC	Diamond Core (drilling)
DYL	Deep Yellow Limited
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
EPL	Excusive Prospecting Licence
L	litre
M	metre
MEFT	Ministry of Environment, Forestry and Tourism
mg/L	milligram per litre
MME	Ministry of Mines and Energy
mSv/yr (mSv.a^{-1})	milli Sievert per year
NNNP	Namib Naukluft National Park
RC	Reverse Circulation (drilling)
RUN	Reptile Uranium Namibia (Pty) Limited
SEA	Strategic Environmental Assessment
SHEM	Safety, Health and Environment Manager
SHECO	Safety, Health and Environment Control Officer
TDS	Total Dissolved Solids