

**Updated Environmental Management Plan –
Application for the Renewal of the Environmental
Clearance Certificate (ECC)**

Camp Onduli near Khorixas in Kunene Region

June 2023

ECC Renewal Application No.:

APP-01347

Expired ECC No.: ECC00152

Ultimate Safaris (Pty) Ltd

P. O. Box 99709

Windhoek



Table of Contents

List of Figures and Tables.....	iii
Abbreviations and Acronyms	iii
Appendices.....	iv
Glossary.....	iv
1 Introduction.....	1
1.1 General	1
2 Project Overview	1
3 Project Phases Activities	5
3.1 Construction Phase - Completed	5
3.1.1 Construction Workforce and Duration.....	5
3.1.2 Construction Services and Utilities	5
3.2 Operation and Maintenance Phase	6
3.2.1 Operation Workforce	7
3.2.2 Operational Phase Services and Utilities	7
4 Roles and Responsibilities: Implementation of the EMP.....	8
4.1 Camp Manager.....	8
4.2 Safety, Environment and Health (SHE) or Environmental Control Officer	9
5 Environmental Management Plan Actions	9
5.1 Operation Phase - Instructions to the Camp Manager	12
5.1.1 Mitigation Measures	12
5.1.2 Monitoring	23
6 Recommendations and Conclusions.....	24
6.1 Recommendations	24
6.2 Conclusion.....	24

List of Figures and Tables

Figure 2-1: Location of Camp Onduli in the Doro !Nawas Conservancy, Kunene Region 3

Figure 2-2: Site layout of the private Camp (Onduli) in the Doro !Nawas Conservancy near Khroixas, Kunene Region 4

Figure 3-1: Photos of the view of Camp Onduli’ site before construction 5

Figure 3-2: Photos of Camp Onduli (*Onduli Ridge*)’s operational phase in the Doro !Nawas Conservancy 7

Figure 6-1: The fuel tanks depicting the catchment housing in case of spills, where the capacity is greater than that of the tanks..... - 29 -

Table 5-1: Legislation applicable to the project in terms of permitting and licensing 10

Abbreviations and Acronyms

DEA & F	Department of Environmental Affairs and Forestry
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
GN	Government notice
I&AP	Interested and Affected Party
MAWLR	Ministry of Agriculture, Water and Land Reform (formerly known as the Ministry of Agriculture, Water and Forestry (MAWF))
MEFT	Ministry of Environment, Forestry and Tourism

MME	Ministry of Mines and Energy
NHC	National Heritage Council of Namibia
RA	Roads Authority
SABS	South African Bureau of Standards
SHE	Safety, Health & Environment

Appendices

Appendix A: Environmental Clearance Certificate (ECC)

A1: The original expired Environmental Clearance Certificate (ECC) No. 00152

A2: The original expired Environmental Clearance Certificate (ECC) No. 00152
(as amended)

Appendix B: Key Aspects for monitoring and actions thereto for the Operation phase

Appendix C: MME Consumer Installation Certificate issued for Camp Onduli

Glossary

Environment - As defined in the EMA- the complex of natural and anthropogenic factors and elements that are mutually interrelated and affect the ecological equilibrium and the quality of life, including – (a) the natural environment that is land, water and air; all organic and inorganic matter and living organisms and (b) the human environment that is the landscape and natural, cultural, historical, aesthetic, economic and social heritage and values.

Environmental Management Plan – as defined in the EIA Regulations, a plan that describes how activities that may have significant environments effects are to be mitigated, controlled and monitored.

Interested and Affected Party (I&AP) - in relation to the assessment of a listed activity includes - (a) any person, group of persons or organisation interested in or affected by an activity; and (b) any organ of state that may have jurisdiction over any aspect of the activity.

Mitigate - practical measures to reduce adverse impacts.

Proponent – as defined in the Environmental Management Act, a person who proposes to undertake a listed activity.

1 Introduction

1.1 General

This Environmental Management Plan (EMP) contains practical measures that must be taken to ensure that potentially negative impacts upon the environment (biophysical and social) are minimised or completely avoided as a result of the operations of the private camp (Camp Onduli) by Ultimate Safaris (Pty) Ltd (the Proponent) within the Doro !Nawas Conservancy in the Kunene Region. The locality map is shown in Figure 2-1 herein.

Namibia's Environmental Management Act (EMA) (7 of 2007) requires that an EMP be put in place before a project is implemented. This is usually prepared as part of an Environmental Assessment (EA) – either at a preliminary or scoping-level, or at the level of a more thorough, full detailed assessment. The camp operations has not posed any significant negative environmental impacts to date, therefore a scoping-level Environmental Assessment (EA) has been conducted.

This EMP as initially developed in August 2019 (and amended in November 2021) has been valid for the planning, construction and operational phases of the private camp (see Figure 2-1 and Figure 2-2). Each phase has a number of sub-activities, which all need to be managed in a specific way. The closure of this camp is not specifically addressed in this EMP. The activities are however similar in nature to that of general construction activities. Therefore, the relevant instructions to the construction contractor in the initial (amended EMP) will be applied to the appointed closure contractor, when the time comes.

Upon submission of the EMP, an Environmental Clearance Certificate for Camp Onduli (ECC 00152 – Appendix A) was issued on the 27th of September 2019 (as amended on the 07th of December 2021) and expired on the 27th of September 2022. The approved EMP has been and continues to be implemented onsite. Monitoring reports have been compiled and submitted to the Ministry of Environment, Forestry, and Tourism (MEFT) with the last submission made in July 2022 (for the period of September 2020 to September 2021).

2 Project Overview

The operations of a private tourist accommodation (Camp Onduli) facilities located in the Doro !Nawas Conservancy, approximately 55km southwest of Khorixas in the Kunene Region (see Figure 2-1 and Figure 2-2). The camp, also known as the *Onduli Ridge Camp* and its associated facilities cover a surface area of about 7 hectare (70,000m²). The Doro !Nawas

Conservancy is under the custodianship of the government of the Republic of Namibia through the MEFT.

The private camp components and associated infrastructure are as follows:

- A camp with main area (consisting of a main reception, dining area, lounge, kitchen, public toilets and swimming pool among other facilities) with guest units (6 standard accommodation units). Each unit has a flushing toilet, shower and wash basin installed, working on a septic tank system.
- Staff accommodation and support infrastructure (e.g. storerooms and laundry room).
- The water required for construction and operation is sourced from two existing boreholes within the Conservancy (described in greater detail below).
- All sewage is treated with chambered septic tank systems designed according to recognised standards (e.g. South African National Standards). The fate (i.e. discharge or reuse or both) of the final treated effluent is yet to be decided.
- Electricity is supplied by a single solar photovoltaic installation with lithium ion energy storage. The solar panels onsite are roof-mounted on structures near the main area. The size of the solar system is yet to be determined.
- A diesel generator is kept on-site and used as a backup electricity source.
- A 10,000 litre/10 m³ consumer (diesel fuel) storage tank was installed onsite. The fuel installation includes the following:
 - 4 x 2500 litre/ 2.5 m³ polyethylene tanks
 - 3 x tanks (i.e. 7,500 litres/ 7.5 m³) for one bunded area and 1 tank (i.e. 2,500 litres/ 2.5 m³) for the other
 - Each bunded area is impermeable and sufficient to hold 110% of the fuel storage capacity – i.e. 8,250 litres/ 8.25m³ and 2,750 litres/ 2.75m³, respectively
 - Each fuel tank is mounted on a steel stand inside a bund 900mm above the concrete plinth
 - Fuel is dispensed via gravity and not pumped (i.e. no electrical components)
 - The bunded area is under corrugated steel roof for shade.
 - A fire extinguisher with specifications suitable to the fuel installation is mounted on outside of bund wall.
- There is an existing airstrip, but the ownership is unknown. This airstrip is located about 7km south of the camp site. The airstrip is not currently in use, as it belonged to an old mine, which was owned by Gold Fields Ltd. The Proponent intends to use it solely for their operations. The current weekly flight frequency for this airstrip is unknown.
- Generally, no fencing is used in the concession area.

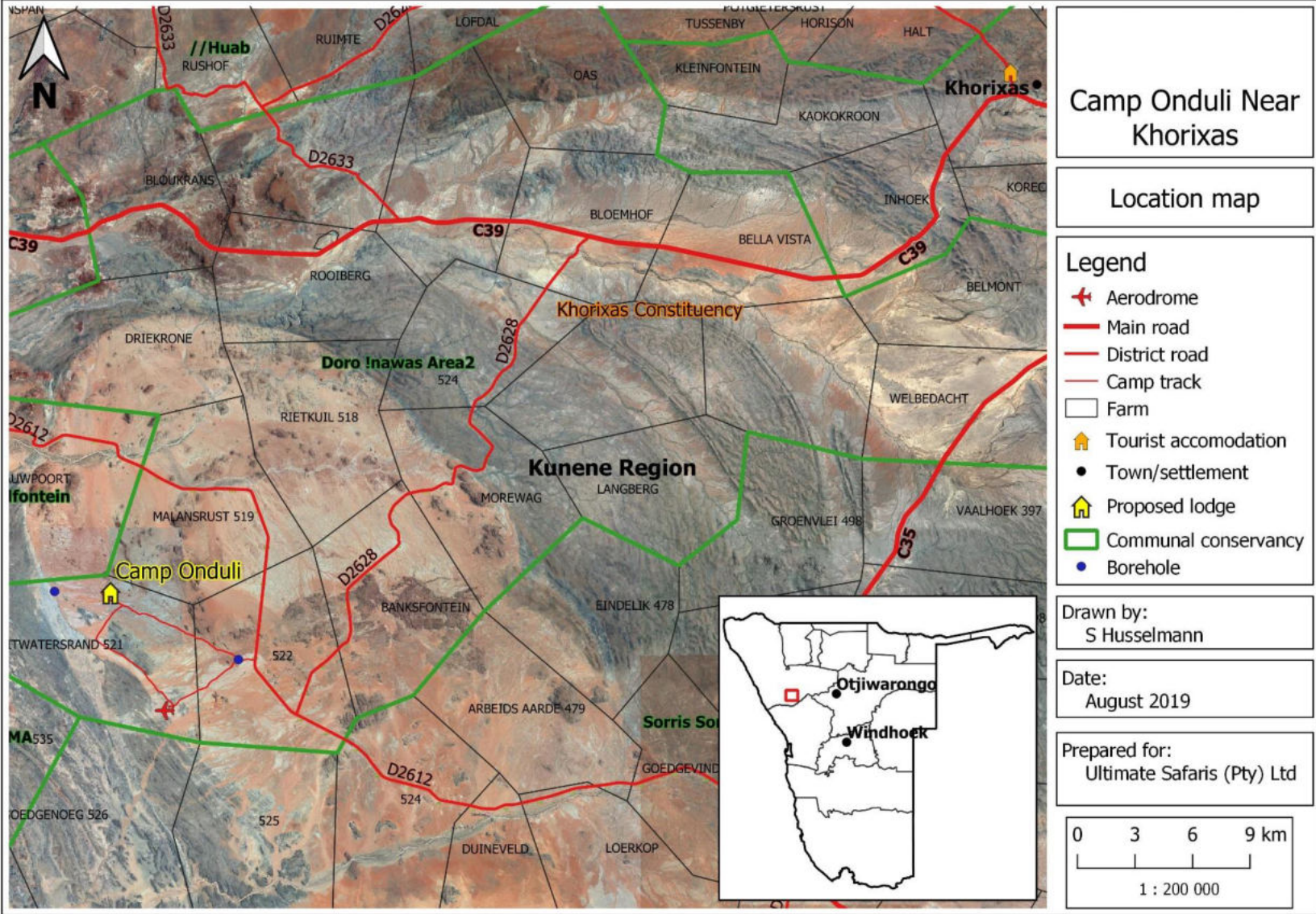


Figure 2-1: Location of Camp Onduli in the Doro !Nawas Conservancy, Kunene Region

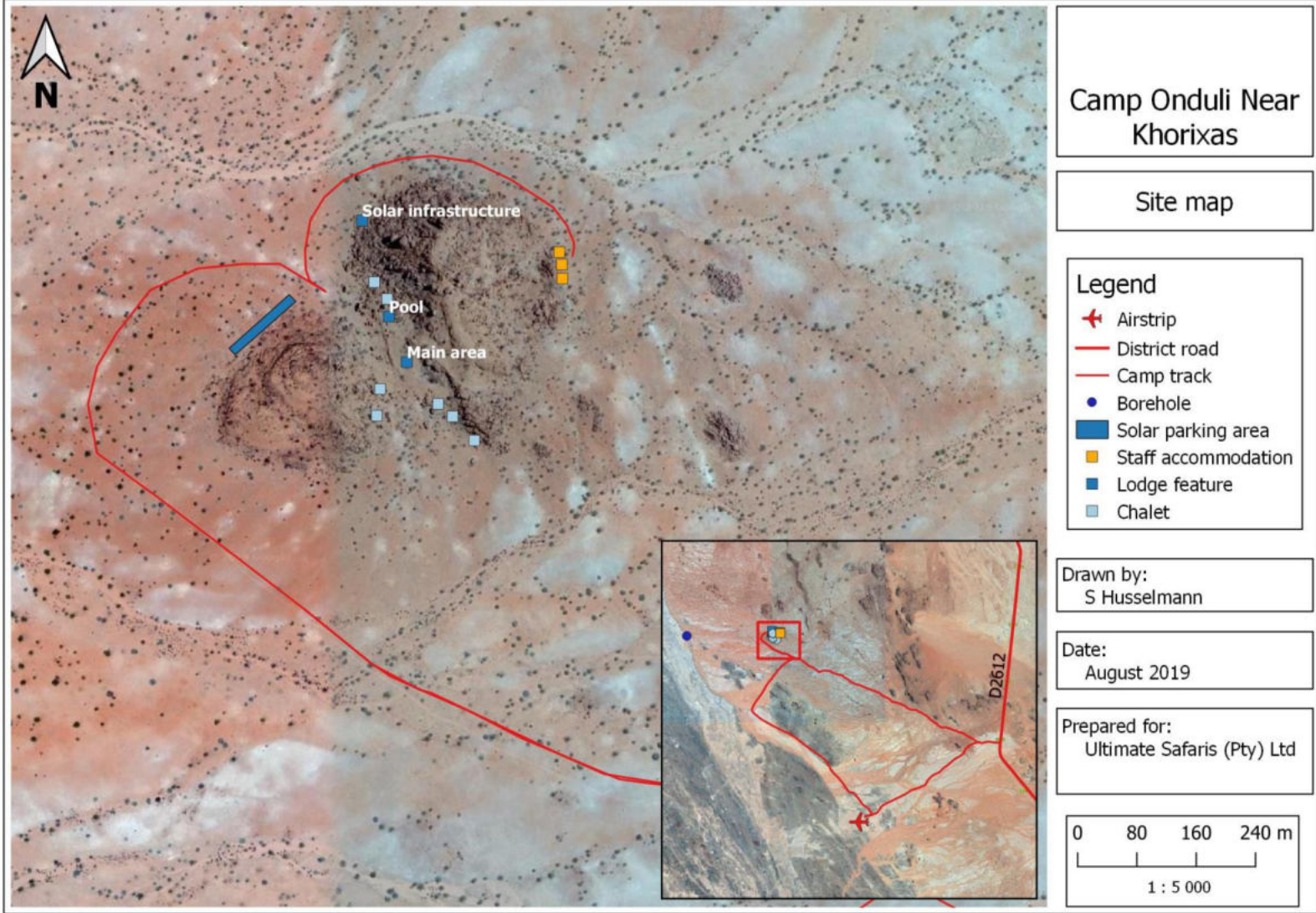


Figure 2-2: Site layout of the private Camp (Onduli) in the Doro !Nawas Conservancy near Khroixas, Kunene Region

3 Project Phases Activities

3.1 Construction Phase - Completed

3.1.1 Construction Workforce and Duration

The Proponent appointed a contractor for the construction of the entire camp and related facilities and infrastructure. The construction crew were housed in a temporary accommodation on-site for the duration of the construction works. About twelve (12) people had been employed for the construction phase.

The construction period was about three months. Photos of the project (camp) site before construction are shown in Figure 3-1 below and the post-construction (operational phase) photos are provided under Figure 3-2.



Figure 3-1: Photos of the view of Camp Onduli' site before construction

3.1.2 Construction Services and Utilities

The services and utilities required during the construction phase include:

3.1.2.1 *Water Supply*

The water for construction works was sourced from the existing nearby water sources (i.e. two boreholes) within the Conservancy, located approximately 2km west and 7km south-east

of the project site respectively (as shown in Figure 2-1). The two boreholes are approximately 5km apart.

According to the information provided by the Proponent, the following water volumes were used for construction works:

- Approximately 1000 litres per day (1000 l/day) were required for construction works such as concrete mixing etc.; and
- Average of 50 litres per person per day (for about twelve (12) people), i.e. approximately 600 litres/day is used onsite.

3.1.2.2 Fuel Supply

A small amount of fuel (for backup generators) is stored in a secured mobile storage tank (for the construction phase) and for the operational phase, in a secured stationary tank on an impermeable bunded surface on-site.

3.1.2.3 Electricity Supply

Electricity was provided by generators supplied by the appointed contractor (during construction).

3.1.2.4 Sewage Management

For the construction phase, a sufficient number of portable toilets were supplied by the appointed contractor on-site.

3.1.2.5 Solid Waste Management

Solid waste has been collected in a secure central place on-site, removed from the conservancy and disposed of at the nearest waste management site (Khorixas).

3.2 Operation and Maintenance Phase

The Proponent manages the operations of the camp (Figure 3-2), and the following activities are undertaken on-site for the operational and maintenance phase of the private camp:

- Game drives.
- Guided nature walks into the area by one of the Proponent's naturalist guides.
- Cultural tourism is also being considered.
- General hospitality services (restaurant, reception and administration, laundry etc.).
- General maintenance works.



Figure 3-2: Photos of Camp Onduli (Onduli Ridge)'s operational phase in the Doro !Nawas Conservancy

3.2.1 Operation Workforce

The camp operations has two caretakers (permanently resident on-site) employed from the local Conservancy. The caretakers' responsibility is to maintain and look after the site as well as the infrastructure. The two assists the Proponent to prepare for and look after the camp guests.

The workforce is accommodated on-site in the staff houses (accommodation).

The Proponent keeps on-site maintenance to a minimum. All operational phase vehicles are serviced in Windhoek, and not on-site.

3.2.2 Operational Phase Services and Utilities

The wastewater and electricity requirements for the camp operational phase have been detailed above. The remainder of the services requirements and other operational management activities are as follows:

- Water - Average of up to 200 litres per person per day. On full occupancy, the camp can accommodate sixteen (16) guests and 12 staff, which equates to a maximum water demand of approximately 5,600 litres/day. Water is sourced from two existing boreholes located approximately 2 km west of the camp. Three water tanks each with a capacity of 10,000 litres (i.e. 30,000 litres in total) are installed on-site to store water.
- Road access – The camp is accessed via an existing single-track road from D2612 road.

- Airstrip - This facility is located about 7km south of the camp.
- Solid waste management – Waste is sorted on-site for the purpose of recycling and transported to Windhoek once a week, where it is collected by a waste management company.
- A 10,000 litre/10 m³ consumer (diesel fuel) storage tank was installed onsite. The fuel installation includes the following:
 - 4 x 2500 litre/ 2.5 m³ polyethylene tanks
 - 3 x tanks (i.e. 7,500 litres/ 7.5 m³) for one bunded area and 1 tank (i.e. 2,500 litres/ 2.5 m³) for the other
 - Each bunded area is impermeable and sufficient to hold 110% of the fuel storage capacity – i.e. 8,250 litres/ 8.25m³ and 2,750 litres/ 2.75m³, respectively
 - Each fuel tank is mounted on a steel stand inside a bund 900mm above the concrete plinth
 - Fuel is dispensed via gravity and not pumped (i.e. no electrical components)
 - The bunded area is under corrugated steel roof for shade.
- A fire extinguisher with specifications suitable to the fuel installation is mounted on outside of bund wall.

4 Roles and Responsibilities: Implementation of the EMP

The EMP (as amended) identified the Camp Manager and Safety, Health and Environment (SHE) also known as Environmental Control Officer (ECO) as important roles to guide the environmental management of the camp design and planning, construction (establishment) and operational activities. These roles might however in practice, owing to various circumstances, be undertaken by one person. A list of specific responsibilities and duties to be undertaken by each are provided below.

It should be noted that the aforementioned roles are delegated roles and the owners of Ultimate Safaris (Pty) Ltd are ultimately responsible for the implementation of the EMP.

4.1 Camp Manager

The Site Manager will be responsible for the following:

- Operating the camp and overseeing all activities on-site during operations.
- Managing/overseeing the implementation of this EMP and updating and maintaining it when necessary.

- Issuing fines to individuals who contravene EMP provisions and if necessary, removing such individuals from site.
- Setting up and managing the schedule for the day-to-day activities.
- Liaison with all relevant interested and affected parties/stakeholders.
- Ensuring all incidents are recorded and documented.
- Undertaking an annual review of the EMP and amending the document when necessary.

4.2 Safety, Environment and Health (SHE) or Environmental Control Officer

The SHE Officer will be responsible for the following activities:

- Planning and carrying out site inductions to the workers on-site and visitors to the camp.
- Ensure that the requirements of the EMP are carried out during applicable activities throughout the project life span.
- Monitoring the overall implementation of the EMP during construction and operation.
- Preparing and submitting public relations reports, if required.

5 Environmental Management Plan Actions

The aim of the management actions laid out below 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 mitigation measures recommended to manage the potential impacts identified in the scoping report for the project. These mitigation measures have been arranged in the EMP as follows:

- Applicable legislation in terms of permitting/licensing (Table 5-1);
- Operation and maintenance phase management actions (Section 5.1) and the monitoring under Section 5.1.1.

The Proponent and their appointed Project Manager, who are in charge of the whole operation, have the final responsibility for implementation of the EMP.

The EMA implies that the EMP should be monitored. Monitoring needs to be intensive (maybe weekly) during the construction phase (this was done), while during the operational phase it can be twice per year (bi-annually) or annual. Renewal of the Environmental Clearance Certificate (after 3 years) depends on the results of monitoring exercises.

The Proponent should assess these commitments in detail and should acknowledge their obligation to the specific management actions detailed in the tables of the following Sections.

Table 5-1: Legislation applicable to the project in terms of permitting and licensing

Legislation	Provisions	Contact Details
Environmental Management Act 2007 Environmental Impact Assessment (EIA) Regulations (EIAR) (GG No. 4878)	Activities listed in Government Notice (GN) No. 29 of GG No. 4878 require an Environmental Clearance Certificate (ECC). The amendment, transfer or renewal of the ECC (EMA S39-42; EIAR Regs19 & 20). Amendments to this EMP will require an amendment of the ECC. The ECC needs to be renewed every 3 years.	Mr Timoteus Mufeti: Environmental Commissioner – Department of Environmental Affairs & Forestry at the MEFT Tel.: +264 (0) 61 284 2701
Labour Act 11 of 2007 Health and Safety Regulations (HSR) GN 156/1997 (GG 1617).	Adhere to all applicable provisions of the Labour Act and the Health and Safety regulations.	N/A
Water Act (54 of 1956) Water Resources Management Act No. 11 of 2013	License and permit requirements of the applicable water and wastewater legislation	Mr Franciskus Witbooi: Deputy Director: Water Law & Administration Policy - Ministry of Agriculture, Water and Land Reform (MAWLR) Tel: +264 (0) 61 208 7226
Road Traffic and Transport Act 52 of 1999 and its 2001 Regulations	Provides for the control of traffic on public roads and the regulations pertaining to road transport, including the licensing of vehicles and drivers.	Mr Eugene de Paauw: Specialist Road Legislation - Roads Authority Tel.: +264 (0) 61 284 7027
Petroleum Products and Energy Act (No. 13	Regulation 3(2)(b) states that “No person shall possess or store any fuel except under authority of a licence or a	A Consumer installation certificate should be

Legislation	Provisions	Contact Details
of 1990) Regulations (2001)	certificate, excluding a person who possesses or stores such fuel in a quantity of 600 litres or less in any container kept at a place outside a local authority area”	obtained from the Ministry of Mines and Energy (MME) Mr Carlo Mcleod: Acting Director – Petroleum Affairs Tel.: +264 (0) 61 284 8291
Forestry Act (No. 12 of 2001)	Permits are required for the removal of protected plants species.	Mr. Johnson Ndokosho: Forestry Director: MEFT Head office in Windhoek Tel.: +264 (0) 61 208 7666 Tel.: +264 (0) 61 284 2111 OR Northwest Regions Forestry Offices (MEFT: Forestry) Tel: +264 (0) 61 208 7320
Nature Conservation Ordinance No. 4 of 1975 (as amended)	Permits are required for the removal of protected plants species.	Northwest Regions Forestry Offices (MEFT: Forestry) Tel: +264 (0) 61 208 7320
Namibia Tourism Board Act 21 of 2000	The Proponent should obtain the necessary authorisation for the camp from and/or register with the Namibia Tourism Board.	Namibia Tourism Board Mr. Digu //Naobeb: Chief Executive Officer Tel.: +264 (0) 61 290 6013
National Heritage Act (No. 27 of 2004)	Discovered heritage resources should be reported to the National Heritage Council.	Mrs. Erica Ndalikokule: Director - National Heritage Council (NHC) of Namibia Tel: +264 (0) 61 301 903
Namibian Civil Aviation Regulations, 2001	Authorisations pertaining to the operation of an airstrip.	Ms. Toska Sem: Interim Executive Director– Namibia Civil Aviation Authority (NCAA) Tel: +264 (0) 83 235 2100

The management measures for the operational phase as implemented are provided below.

5.1 Operation Phase - Instructions to the Camp Manager

Objective: To manage the camp with minimal disturbance to the surrounding biophysical environment, and to ensure that guests to the camp behave in a way that does not impact negatively on the environment, wildlife and other land owners or users (e.g. tourist activity).

The term 'environment' includes the biophysical and social environment, which is why this EMP deals with both. However, the EMP does NOT cover equally important aspects such as customer care, financial management, stock control, etc. These 'business management' issues are outside the scope of an EMP, though of course they are critical in running a camp properly.

Environmental performance indicator:

- Visitors notice the efforts being made by the camp to be 'environmentally friendly' and they cite this as one of the main reasons why they return to stay at the camp in future.

Who is responsible?

- The Camp Manager is responsible for ensuring that the entire operation (on and off-site) of the camp conforms to the standards usually ascribed to 'eco-tourism'.
- The camp owner or Proponent should write the job description for the Camp Manager, ensuring that the relevant sections of this EMP are included as his/her duties
- The Camp Manager should compile an environmental report on a regular basis (e.g. quarterly, tri-annually, or semi-annually) according to a prescribed format. These reports will aid in the compilation of the annual monitoring reports, which will be required when renewal of the Environmental Clearance Certificate is needed after 3 years, i.e., every 3 years of the camp operations.

5.1.1 Mitigation Measures

The following environmental management issues require attention:

- A. Waste management**
- B. Water management**
- C. Energy management**
- D. Tourist management**
- E. Pest management**
- F. Maintaining sense of place**
- G. Wildlife management and protection (poaching)**
- H. Airstrip**

A. Waste Management

Human waste

- All toilets should drain into two- or three-chambered septic tanks, which are designed according to recognised standards (e.g. South African National Standards) and able to cope with high and low flow rates. The bacteria within a septic tank require a certain minimum flow to keep active.
- Notices must be placed at each toilet to remind guests not to flush foreign objects down the toilet.
- Each septic tank should have a grate trap at the inflow, and this should be cleaned regularly.
- Use appropriate, bio-degradable toilet cleaners that do not kill the bacteria in the septic tank (various products are available on the market).
- Drains from kitchens must have an oil trap and a grate trap. The purpose of these is to trap oily waste, which can clog up or slow down decomposition in the septic tank, and to catch kitchen off-cuts such as scraps of meat, vegetables etc. The traps must be cleaned daily, and the scraps must be thrown into the appropriate bin.
- The Proponent should adhere to any licence/permit requirements of the applicable water and wastewater legislation.

Domestic waste (kitchen scraps, tins, bottles, plastics, paper, etc.)

- Reduce the amount of waste that is generated. In this regard, try to:
 - Buy supplies in large containers (e.g. cooking oil, tinned food, and cleaning materials) so as to avoid too many empty bottles, tins, etc.
 - Avoid purchases that are packaged excessively – e.g. rather buy 5 loose, unpackaged lettuces and put them in a cool box than buying 5 lettuces packaged individually in plastic and styrofoam.
- Separate all organic waste (e.g. kitchen waste), and dump this in a designated compost heap on site. This should be an enclosed place where it cannot be dug out and scattered about by scavengers.
- All recyclable waste (e.g. bottles, tins, plastic packaging, cardboard boxes, paper) should be neatly stored to optimise re-use and recycling, or must be removed from site at least once a week.
- Any waste that is stored temporarily at the site must be secured to avoid it being blown into the surrounding areas, and to prevent it being scavenged by local wild animals such as jackals, hyenas etc.

A. Waste Management

- Measures must be taken to prevent any waste from attracting scavengers (e.g. kitchen waste should not be left to rot in the open so that it generates smells which will attract animals).

Bulky waste (e.g. building rubble)

- All combustible waste (e.g. empty cement bags), should be burned in a drum or enclosed container, with the necessary care taken to avoid the possibility of starting a veld fire.
- Bulky materials that can be re-used (e.g. wooden planks, metal offcuts, tyres) should be stored separately and neatly, so that they can readily be found and used when needed.

Hazardous waste (batteries, paints, solvents, thinners, used or expired medical equipment)

- These types of waste must be kept separate from other waste and should not be dumped in the general waste dump.
- Hazardous waste should be collected and disposed of periodically at a hazardous waste treatment facility (e.g. Walvis Bay or Windhoek).

Waste disposal

- Any waste that cannot be composted or re-used or recycled or burned should only be dumped at a properly managed waste disposal site.
- When transporting the waste to the dump site, ensure that there is no possibility of waste blowing or falling off the vehicle. The best solution is to load the bins onto the vehicle so there is no need to transfer the waste from one drum to another. This means that at least 2 sets of bins will be required, because set number 2 will be in operation while set number 1 is being transported to and from the dump.
- At the dump, the bins should be completely emptied and dried. They must be returned to the camp clean and dry.

General

A. Waste Management

- Make collaborative arrangements with neighbouring establishments (the local community, as represented by the Conservancy Committee should be considered) to streamline waste management and improve economies of scale.
- All chemicals used on the site (e.g. for cleaning and polishing) should be of the biodegradable type.
- Compile a purchasing policy that emphasises:
 - Organic, biodegradable products or with non-toxic ingredients
 - Buying in bulk
 - Using containers that can be re-used
 - Minimal packaging
 - Avoiding disposable items which add to the amount of waste that must be recycled or disposed of.

B. Water Management

Minimise water consumption

Aim to keep water consumption average to below 150 litres of water per day per person (divide total daily consumption by the number of people at the camp – guests and staff).

Adopt the following strategies:

- Install low-flow shower heads.
- Insert aerators in showers and taps – these add air to the water and reduce the amount of water that flows through.
- Install minimal-water flushing devices in the toilets (e.g. dual-flush toilet systems). Do not install any automatic flushing devices anywhere.
- Place a prominent notice in each room and in all staff quarters informing users about the importance of saving water. Specifically request guests to:
 - Take short rather than long showers
 - Turn taps off after washing
 - Use towels more than once before asking for them to be laundered
 - Not wash their vehicles whilst at the camp

B. Water Management

- Only flush the toilet when necessary
- Water reuse/recycling methods should be implemented as far as practicable
- Do not create any lawns or large gardens that need to be watered (a small vegetable garden using grey water (if possible) is permitted).
- Ensure that pools are covered when not in use.
- Wash vehicles with a bucket, not a hose.
- Clean driveways and parking areas with a broom, not with water.
- Ensure that all pipes are well maintained and that leaks are repaired immediately.
- Ensure that all taps are turned off after use.
- Install water metres at places where consumption can be usefully monitored. Keep a register of water consumption (daily / weekly measurements) so that trends can be monitored. Use this information to gradually improve consumption levels.
- Create incentive schemes for staff to reduce their water consumption.
- Use the information from the yield test and/or geohydrologist's professional opinion to inform the abstraction rate and water consumption practices during operation of the camp.

Prevent water pollution

See waste management notes above.

C. Energy Management

Promote renewable energy

Use as much renewable energy as possible and limit the use of fossil fuels in the generation of energy. This can be achieved by:

- Generators should be used as little as possible.
- The solar energy systems should be well maintained so that they remain efficient.

C. Energy Management

- Where fires are used for creating ambience in the camp, or for warmth (during winter), use wood that comes from bush encroaching species, if possible. Ensure that there are no significant negative environmental impacts associated with the supply of wood (e.g. over-exploitation of a certain non-encroaching species or cutting of protected species).
- The site generator(s) should be automatically switched on once every week so that it is / they are not idle.

Reduce energy consumption, avoid energy wastage

Lights:

- Install only power-saving bulbs (e.g. compact fluorescents or light emitting diodes (LEDs)).
- Use daylight switches on all outside lights that must be on at night (so that they switch off during the day).
- Use movement-activated lights outside as much as possible.
- Instruct staff to switch off lights and air-cons if guests do not do so when leaving their rooms.

D. Tourist Management

At the camp

Place information materials in each guest room, in which tourists are informed about:

- The importance of conserving water.
- How to be energy-efficient.
- The rules regarding the feeding of animals.
- Appropriate pest control (e.g. swot a fly rather than spray insecticide).
- Not placing foreign objects down the toilet.
- Respecting the rights of other guests (e.g. refraining from making a noise, playing radios, musical instruments, etc.).

D. Tourist Management

On game drives with the camp vehicle

When tour guides see wild animals such as lions and elephants away from the roads, they might drive off the existing road tracks leading to damaging of remaining grazing areas, which are limited in extent, for local animals in this drought. The following measures are recommended to manage the impacts related to off-road driving:

- The Proponent should implement strict protocols and provide training to their guides pertaining to off-road driving in order to minimise the impact on local grazing areas.
- The tour guides should be instructed to limit the vehicles tracks to existing road as far as possible.
- The guide may only take guests to sensitive sites (e.g. ecologically, archaeologically etc.) if arrangements have been made beforehand and if there is agreement on what the guests may see and do once at these sites.
- The guide must maintain an appropriate level of control during the drive – specifically:
 - No littering allowed (always have a refuse bag in the vehicle).
 - No noise.
 - No throwing of objects at wildlife.
 - No throwing of burning objects off the vehicle (e.g. cigarette butts).

On game drives with own vehicles

While the camp has no control over what people do when they are in their own vehicles, they can encourage good behaviour by providing guidelines. These should be set of 'dos and don'ts' that people can take with them on their drive. The guideline should strongly discourage:

- Off-road driving.
- Littering.
- Harassing of wildlife.
- Speeding.
- Excessive noise (e.g. hooting, revving the engine, etc.).

D. Tourist Management

- Throwing of burning objects off the vehicle (e.g. cigarette butts).
- Going to the toilet in the veld.

E. Pest Management

Since the camp is located in a conservation area, it is to be expected that various species of wildlife will be attracted to the camp, and some (e.g. birds, lizards) may even live in the camp. It is important that the right balance be maintained in ensuring the comfort and safety of staff and guests, while at the same time accepting that the presence of wildlife is inevitable and, in some cases, desirable. Specific management safeguards are:

- Never feed wildlife (except birds, and then place food in hanging bird feeders).
- Never leave food uncovered or in a place where it is accessible to wildlife.
- Manage waste properly, so that it does not attract scavengers.
- Try non-poisonous remedies or direct hitting for insect control, before using insecticides.
- Use traps for rodents and not poison.
- Capture and remove dangerous snakes, rather than killing them.
- Never kill useful animals, such as chameleons, lizards, bats, etc. which will help the camp to control unwanted insects such as flies and mosquitoes.
- Maintain high levels of cleanliness, especially in the kitchen.
- Install fly gauze doors and fly screen over selected windows to reduce the numbers of flies and other insects entering buildings.
- Switch off lights when they are no longer needed (lights attract insects).
- Supply mosquito nets.
- Do not have lawns or beds of exotic plants, since these often require intensive pest control.
- At least one or two members of staff should receive training on how to handle snakes. This will ensure that snakes can be safely removed from site when necessary as opposed to being killed.

F. Maintaining Sense of Place

Sense of place is a vague term and can be interpreted differently by different people. It means a number of things, including atmosphere, vibe, style and general ambience. While it is difficult to define exactly, it becomes very obvious when a camp loses its sense of place. This usually happens if the camp is badly designed in the first place, but it can also happen as a result of bad management.

Management must not cause the camp to lose its sense of place, and in this regard they must specifically avoid:

- Inappropriate furniture (plastic tables and chairs, etc.).
- Shabbiness – dirty linen, dust, dirt, poorly-dressed or unclean staff, untidiness, un-emptied ash-trays, etc.
- Disrepair – dilapidated infrastructure creates a very poor impression.
- Noise – no radios, TVs, hi-fi's, noisy staff, "revving" vehicles, rattling air conditioners, low-flying aircraft, motorcycles, quad bikes, etc.
- Smells – make sure that waste is properly managed so that people do not smell the rubbish bins. Also keep drains etc. clean so that these are not smelly. However, avoid the use of highly potent cleaners – guests do not want to smell detergents either.
- Over development – do not have too many signs, or any other objects that detract from the natural beauty of the area. Visitors to the area want a nature experience, with an uncluttered atmosphere.
- Scrap – make sure there are no old vehicles or pieces of old equipment lying around.
- Sterility – whilst it is important to keep the camp clean, do not sterilize it – this is a camp, not a hospital.
- Too many people – this will quickly destroy sense of place. Guests to the camp want a certain degree of privacy. Also, there should not be people loitering around at the camp, whether visiting staff or looking for work.

G. Wildlife Management and Protection

Protection of wildlife against poaching

The presence of the camp may attract many people into the area, and that may not only attract tourists, but wildlife poachers as well. This would potentially lead to a loss of important wildlife in the area. The loss of wildlife would negatively affect the operations of the camp as well as the conservancy functions, because the wildlife presence would be the reason the tourists visit the area and camp on-site (accommodated in the camp). The following measures have been recommended to mitigate potential poaching in the area:

- No wild animals may be trapped or killed for any reason whatsoever.
- At least one or two members of staff should receive training on how to handle snakes. This will ensure that snakes can be safely removed from site when necessary as opposed to being killed.
- The mere presence of reputable and trusted tourism operators provides a deterrent against illegal wildlife-related activities. Therefore, with their experience in the industry, the Proponent should consider implementing stringent anti-poaching measures.
- Any suspected poaching activities should be reported to the nearest Police Station and the Proponent should work together with the nearest Police Station and/or anti-poaching unit in the area to combat this crime.
- Anti-poaching awareness should be raised among the site workers as well as the community to inform them of the impacts of poaching on camp operations, environment and eventually their own lives (e.g. income generated from their jobs).

H. Airstrip

Airstrip:

H. Airstrip

- All neighbouring residents should be informed of (via the relevant authorities (e.g. conservancy committee and/or traditional authority) and directly) to the fact that the traffic at the airstrip will increase once the camp is operational.
- All neighbouring residents should be informed of the necessity of keeping animals off the runway at all times.

I. Energy Management

Bulk storage of fuel:

- The design and construction of the parts, general layout and fire equipment of the consumer installation should adhere to the required standards (e.g. the relevant South African Bureau of Standards (SABS)) as prescribed by the MME.
- A Consumer installation certificate should be obtained from the Ministry of Mines and Energy (MME). The Proponent applied for the Certificate, however, it has not been issued yet. The responsible committee at MME has not had quorum which led to a delay in applications. Therefore, Ultimate Safaris application for the certificate is still under review (in process). .please refer to MME Letter on this matter under Appendix C.
- Fire equipment should be tested and serviced (or replaced if necessary) at least once a year.
- Appropriate warning signage in keeping with the relevant requirements of the MME (e.g. no smoking signs, no cellphone operation while dispensing fuel, etc.) should be clearly displayed at the fuel facility.
- An emergency response plan should be compiled, which outlines what to do in the event of a disaster (e.g. fire or a significant spill).
- All personnel utilising the consumer (fuel) installation should receive the appropriate training (including “refresher training” at least once a year) in accordance with their respective roles and responsibilities.

I. Energy Management

- Occupational health and safety training should include as a minimum the following:
 - Location and proper use of firefighting equipment;
 - Proper conduct:
 - for specific operations (dispensing and tank filling); and
 - generally when handling hydrocarbons within the facility (no smoking, prohibited use of cell phones etc.); and
 - Emergency procedures (fire drills, spill control etc.).
- Appropriate fuel spill equipment/"kits" should be kept on-site. Fuel spills should be cleaned immediately, using appropriate absorbent material contained in the fuel spill equipment.
- All waste hydrocarbon material should be collected and stored in appropriate containers and transported off-site to a suitably qualified third party which routinely handles such waste. An example is Oiltech Namibia (<https://oiltech.com.na/>). The City of Windhoek also has facilities to handle hydrocarbon waste (http://www.windhoekcc.org.na/depa_infra-solid_waste_management.php).

5.1.2 Monitoring

The role of the Environmental Control Officer – i.e. the person responsible for monitoring the implementation of the mitigation measures detailed above, might be carried out by a dedicated member of staff, or might form part of the Camp Manager's responsibilities. Either way, the ECO's monitoring responsibility should be carried out on a regular basis (possibly monthly or twice a month) during the operation phase. The monitoring findings should be incorporated into the monthly/two-monthly environmental reports. As stated above these reports will aid in the compilation of the annual monitoring reports, which will be required when renewal of the Environmental Clearance Certificate is needed after 3 years.

6 Recommendations and Conclusions

6.1 Recommendations

The aim of this document was to review the existing EMP and based on new project information, compile/update the EMP to enable the renewal of the project ECC (operations of Camp Onduli in the Doro !Nawas Conservancy, Kunene Region).

The camp was environmentally cleared in September 2019, and constructed in 2020. An amendment to the initial EMP compiled in 2019 was made in November 2021, which triggered an amendment to the ECC on the 07th of December 2021. An Environmental Monitoring Report had been compiled for the period of September 2020 to September 2021 covering the third and fourth monitoring periods as per the submitted Monitoring Report in July 2022. The fifth and sixth Environmental Monitoring report for the period of September 2021 to September 2022 was recently compiled and submitted to the DEA&F.

The project is still in operation, thus, the potential impacts remain the same, and their occurrence on site have been monitored. The Proponent has been compliant with the requirements of the EMP and conditions set in the ECC. Therefore, the implementation of the recommended management measures (action plans) contained herein will be continued throughout the project cycle.

The RES Environmental Consultants are therefore confident that the Proponent will continue to manage and mitigate the potential negative impacts by effectively implementing the appropriate measures and with continued commitment on implementation monitoring. It is therefore, recommended that the ECC is renewed, subject to the following recommendations:

- All required permits, licenses and approvals for the activities are obtained (and renewed) as required (Table 5-1).
- All mitigations and monitoring measures listed under section 5.1 and respective monitoring are implemented as stipulated.

6.2 Conclusion

RES Consultants recommend that the camp ECC be renewed. It is crucial for the Proponent to continue with the effective implementation of recommended management measures to protect both the biophysical and social environment. Monitoring of EMP implementation should be continued to ensure that all potential impacts identified in the initial Scoping Report and Amendment, and other impacts that might arise during implementation, are properly identified in time and addressed.

During the period of September 2020 to September 2022, the camp operational activities have been done in accordance with the EMP measures. RES Consultants trust that the Proponent will continue to maintain the same commitment towards environmental protection and sustainability, once the ECC is renewed.

Appendix A

A1: The original expired Environmental Clearance Certificate (ECC) No. 00152

ECC – 00152 Serial: N154Q1152



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

Ultimate Safaris (Pty) Ltd
P. O. Box 9970, Windhoek, Namibia

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

The Proposed Development of Camp Onduli in the Doro iNawas
Conservancy near Khorixas, Kunene Region

[Signature]
DEPUTY ENVIRONMENTAL COMMISSIONER

Issued on the date: 2018-09-27
Expires on this date: 2022-09-27

(See conditions printed over leaf)

This certificate is printed without erasures or alterations



**A2: The original expired Environmental Clearance Certificate (ECC) No. 00152
(as amended)**

ECC 00152 Serial: M154QT152



REPUBLIC OF NAMIBIA
MINISTRY OF ENVIRONMENT, FORESTRY 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

Ultimate Safaris (Pty) Ltd.
P. O. Box 9970, Windhoek, Namibia.

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

The Proposed Development of Camp Onduli in the Doro !Nawas
Conservancy (as amended) near Khorixas, Kunene Region.

Issued on the date: 2019-09-27
Expires on this date: 2022-09-27

(See conditions printed over leaf)



Reduce
Reuse
Recycle



This certificate is printed without creases or alterations

Appendix B: Key Aspects for monitoring and actions thereto: Operation Phase


No.	Objective	Requirement	Frequency	Evidence
1.	Sustainable utilisation of groundwater	-Water should be utilised in accordance with the results of the yield.	Weekly	-Provide the total water usage records (monthly) for the period being monitored
2.	Avoid groundwater contamination: wastewater/effluent	Inspect wastewater treatment system to ensure that it is working adequately	Monthly	-All waste water is recycled through a water treatment plant and then reused to water fruit trees and fill the waterhole.
3.	Avoid soil and groundwater contamination: fuel storage	-Inspect the fuel storage area for potential tank leakages -Install fuel leak detectors on the fuel tanks	Monthly	-The fuel tanks area is bunded with an impermeable layer, which also depicts the catchment housing in case of spills, where the capacity is greater than that of the tanks – please refer to the Figure 6-1. -Each fuel tank is mounted on a steel stand inside a bund 900mm above the concrete plinth. -Fuel is dispensed via gravity and not pumped (i.e. no electrical components) -Appropriate warning signage such as "no smoking signs, no cellphone operation while dispensing fuel are clearly displayed at the fuel storage site.
	Ensuring compliance with the requirements of the fuel storage onsite	-The consumer installation permit (certificate) should be obtained and adherence to the conditions is ensured onsite.	-Once off and should be renewed, and or amended	-The application for a consumer installation certificate was issued on the 3rd of February 2022 with a certificate number: CI/2822/2022 – Appendix C.
4.	Prevent the risk of Accidental fire outbreaks	-Inspect the fuel storage site for any flammable substances such as dry woods, open fires	Weekly	-A fire extinguisher with specifications suitable to the fuel installation is mounted on outside of bund wall. -No flammable substances such as dry vegetation, plastics and papers or open fires are present nor allowed onsite and at the fuel storage area.

No.	Objective	Requirement	Frequency	Evidence
5.	Avoid negative conflict	-Address any concerns raised by owners and occupiers of land adjacent to the activity site.	Ad hoc	-The Proponent regularly engages with the Doro Nawas Conservancy Committee on various matters, however, no significant complaints have been raised by the committee during the period under review (i.e. September 2020 to September 2021).




Figure 6-1: The fuel tanks depicting the catchment housing in case of spills, where the capacity is greater than that of the tanks

Appendix C: MME Consumer Installation Certificate issued for Camp Onduli



MINISTRY OF MINES AND ENERGY
PETROLEUM PRODUCTS AND ENERGY ACT, 1990
PETROLEUM PRODUCTS REGULATIONS (2000)
CONSUMER INSTALLATION CERTIFICATE
[Regulation 19 (5)]

CONSUMER INSTALLATION CERTIFICATE		PERMANENT*	PETROL*	Certificate No.
		X		CI/2822/2022
		TEMPORARY*	DIESEL*	
		X		
Name of certificate-holder		Ultimate Safaris (Pty) Ltd		
Address of certificate-holder	Physical Address	Postal Address		
	5 Brandberg Street Windhoek Namibia	P.O Box 9970 Eros Park Windhoek Namibia		
Nature of activity to which certificate relates*	Commercial / Industrial Undertaking	Farming Operation	Mining Operation	
	X			
If Storage tank is to be permanently installed, location of site		Onduli Ridge Doro Nawas Conservancy Khorixas District Namibia		
Conditions applicable to Certificate <i>See overleaf for general and special conditions applicable to license</i>				
Date of Issue of certificate	03 February 2022			
In the case of temporary license, period of validity	N/A			
Issued by the Minister of Mines and Energy in terms of regulations 18(5), on 03 February 2022 at Windhoek				
				
*Mark the appropriate item Namprint: 061-23895				

CONDITIONS APPLICABLE TO CERTIFICATE