
APPENDIX D – ENVIRONMENTAL MANAGEMENT PLAN

1. PROJECT BACKGROUND

Reptilia Crocodile Farm and Park cc is a fully registered, 100% Namibian owned company that proposes to construct and operate a crocodile farm as well leisure park on a portion of the remaining portion of the farm Usakos and Townlands No. 93 in Usakos. The overall objective of the proposed project is to breed the *Crocodylus niloticus* (Nile crocodiles) for conservation purposes, tourism and hide production, thus promoting the long-term survival of the species. The proposed development shall be achieved through the high-level interlinked objectives which include, but are not limited to biodiversity conservation, improved economic growth and living standards at local, regional, national and international levels.

The envisaged operational activities shall include, but are not limited to the following:

- **Ranching (egg collection):** Although some eggs shall also be sourced “on-farm” through breeding programs. The proponent shall enlist the inhabitants of communities where the Nile Crocodiles occurs naturally in their habitat, namely within the Kavango East Region, Kavango West Region and parts of the Zambezi Region to collect eggs for the farm, as part of the incentive-driven conservation programs. The egg collection shall occur from July through November every year.
- **Hatching:** Eggs are transferred to on-farm incubators until hatched where temperature and humidity are carefully controlled to ensure appropriate success.
- **Growing Out:** Juvenile crocodiles shall be typically grown for 1.5 years or until they are approximately 1.2 m long – this shall depend on the intended use. For example, skins produced for a handbag are grown to a belly width of approximately 40 cm (1.2 m long crocodile). The size required varies with the fashion of the day, for example, larger or smaller handbags. Whereas, very large crocodiles, for example, greater than 1.2 m long can be used for pants or a suit.
- **Breeding Program:** Crocodiles shall also be grown and maintained for on-farm breeding and crocodile-based tourism. Farm associated tourism includes crocodile viewing, crocodile feeding, and crocodile shows performed by trained professional wranglers.
- **Harvesting:** Once ready for slaughter the crocodiles are sent to the abattoir where skins shall be removed, and all body parts shall thereafter be separated for sale or value-adding. The skins hold the highest commercial value followed by meat and other products.

2. LEGISLATIONS REQUIREMENT

The proposed project is listed as an activity requiring an environmental clearance certificate as per the Environmental Management Act No.7 of 2007 and its associated regulation 29 (sub-regulation 9) of Government Notice No. 29 of 2012. Reptilia Crocodile Farm and Park has appointed Mr. Titus Shuuya to conduct an environmental assessment and facilitate the process of obtaining an environmental clearance certificate.

3. OVERALL OBJECTIVES OF THE EMP

EMP is a legal binding tool that describes how the proposed project might impact the natural environment in which it occurs and set out clear commitments from the proponent on how those impacts will be avoided, minimised and managed so that they are environmentally acceptable. The overall environmental objectives of the EMP that have been set for the Reptilia Crocodile Farm and Park include, but are not limited to:

- Compliance with the national legislation and standards as well international best practices for the protection of the environment;
- Limit potential impacts on biodiversity through the minimisation of the footprint (as far as practically possible) and the conservation of residual habitat within the project vicinity;
- Ensure that the local communities are informed of proposed project activities through the implementation of forums for communication and constructive dialogue;
- Ensure the legal and appropriate management and disposal of general and hazardous waste as well as wastewater and effluent discharge, through the implementation of a strategy for the minimisation, recycling, management, temporary storage and removal of waste;
- Develop, implement and manage monitoring systems to ensure good environmental performance in respect of the following: ground and surface water, air quality, noise and vibration, biodiversity, wastewater and effluent and rehabilitation.

4. MANAGEMENT, LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THE EMP

This EMP is a legal binding document, however, it does not include procedures or measures for compliance with statutory occupational health and safety requirements. In case there is any conflict between the measures of this EMP, any contractual obligations, contract (s) and other legal requirements shall be considered first. This EMP has been compiled based on the information provided in the environmental scoping report and it shall be amended if the proposed project design, construction and operational methods change.

5. POTENTIAL ENVIRONMENTAL IMPACTS/ISSUES, MITIGATION AND MONITORING PLAN

5.1. Biophysical Environment Management and Mitigation

Issue	Management commitment	Phase
Soil, water, air and waste pollution; Sand abstraction/ extraction; Disturbance of the topsoil	<ul style="list-style-type: none"> • Application of a good housekeeping policy across the work areas • All hydrocarbons, chemicals and fertilizers should be stored within the secondary containment e.g., bund wall. • Minimal vegetation thinning and exposure of soils, however, vegetation thinning should be avoided 100 m from the watercourse. • Identification of areas with high potential of soil erosion risk, and measures should be in place to prevent soil erosion and removal or disturbance of topsoil should be minimized. • Sand should only be extracted or abstracted from an existing permitted borrow pit. 	All
Disturbances to the biodiversity i.e., Fauna and Flora	<ul style="list-style-type: none"> • Ensure application of the company policies relating to environmental sustainability. • No vegetation clearing is envisaged, but only vegetation thinning especially that of the alien species. • No harm to biodiversity or collection shall be tolerated, including collection firewood. • Even though it is unlikely, sighting of any extraordinary biodiversity and or cultural, heritage and or archeological artifacts must be reported immediately to the relevant authorities. In addition, appropriate permits and licenses for the purchase, storage and use or handling of chemicals (including fertilisers, pesticides, fuel and lubricants) must be obtained before commencing the operational phase of the proposed activity. • All hydrocarbons should be stored within the secondary containment and drip trays shall be in place for accidentally spills – and should spillage (minor or major), it should be cleaned immediately. • The electrical fence shall be constructed appropriately to prevent injury to animals, including avifauna species. 	All
Responsibility	Reptilia Crocodile Farm and Park' Project manager	

5.2. Social, Health and Safety Management and Mitigation

Issue	Management commitment	Phase
Accident/incident and near-misses	<ul style="list-style-type: none"> • Development of a health and safety plan – this shall be communicated through site induction. • Provision of appropriate PPE to all the employees (both permanent and temporary) and child labour is prohibited. • Fire protection equipment e.g., fire extinguishers should be charged and provided at the designated areas • All accidents/incidents including near-misses should immediately be reported to the Project Manager – and should be recorded in an incident register. All employees attend the health, safety and environmental induction before starting with work. • Ensure first aid training is provided to certain employees and the first aid box are available and well-stocked onsite. • Adhere to the speed limit at all times. • All accidents/incidents and near-misses should be reported to the project manager and other relevant authorities within 24 hours. • No employees shall be allowed to operate any machinery, equipment including vehicles if not competent e.g., without a valid competent certificate or driving license. 	All
Employment creation and capacity building	<ul style="list-style-type: none"> • Priority for employment should be given to the local community, especially for an unskilled position. • Goods and services should be sourced from the local business to 	All

Issue	Management commitment	Phase
	<p>promote and improve the local economy.</p> <ul style="list-style-type: none"> • Promote and engage and/or involve local school and/or regional as well as I&APs into the crocodile farming activities such as viewing and feeding as part of environmental education benefit. • All employees hired should sign a written employment contract before commencing with the work. The employment contract should comply with the Labour Act and other applicable regulatory frameworks. • All employees should attend health, safety and environmental site induction before commencing with their work. 	
Responsibility	Reptilia Crocodile Farm and Park (Project manager)	

5.3. Stakeholder Management and Mitigation

Channels of communication must be maintained over the life of the project for surrounding landowners, the general public members, local and traditional authorities. The stakeholder's communication management and mitigation plan are summarized below.

Issue	Management commitment	Phase
Understanding who the stakeholders are	<ul style="list-style-type: none"> • Maintain and update the stakeholder register, including stakeholders' needs and expectations. • A representative database would include government, employees, service providers, contractors, local communities, traditional authorities, NGOs, shareholders, customers, the investment sector, community-based organizations, nearest neighbours, suppliers and the media. • Ensure that marginalized and vulnerable groups are also considered in the stakeholder communication process. • Record partnership • ps (if there are any) as well as their roles, responsibilities, capacity and contribution to development. 	All
Liaising with interested and affected parties at all phases	<ul style="list-style-type: none"> • Devise and implement a stakeholder communication and engagement strategy. • Conduct a health, safety and environmental visitors induction, especially those that would like to view the crocodile farm. 	All
Responsibility	Reptilia Crocodile Farm and Park (Project manager)	

6. EMERGENCY AND RESPONSE CONTACTS

The primary contact person in the event of health, safety and environmental emergency shall be the Project or Site manager. All health, safety and environmental accidents/incidents including near-misses should be recorded and reported to the Project or Site manager within 24 hours. Below is a list of the emergency contact details in Usakos town.

Ambulance	Police	Fire brigade	Hospital	Electricity, sewage & water
+264 (64) 53-0023	+264(0)64 530 003	+264 (64) 53-0023	+264 (64) 53-0023	+264 (64) 53-0023

7. IMPLEMENTATION, MONITORING AND EVALUATION OF THE EMP

This EMP is a legal binding document that has been prepared as per Environmental Management Act No.7 of 2007 and its associated Regulations as per agreement with the proponent. It has been prepared based on the information provided by the proponent, literature review, consultation with I&APs and information gathered from the site.