

ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR ACTIVITIES
ASSOCIATED WITH THE SWAKOPMUND MUNICIPALITY'S
PROPOSED NORTHERN BEACH DEVELOPMENT PROJECT,
LOCATED IN SWAKOPMUND, ERONGO REGION, NAMIBIA.

MAY 2021



EXPERTISE AND DECLARATION OF INDEPENDENCE

CONSULTANT'S EXPERTISE

I.N.K Enviro Consultants cc is the independent firm of consultants that has been appointed by THE Swakopmund Municipality to undertake the environmental clearance certificate process.

Immanuel N. Katali, the EIA Lead Practitioner holds a B.Arts (Honors) in Geography, Environmental Studies and Sociology and has over six years of relevant experience in conducting/managing Environmental Impact Assessments (EIAs), Socio-Economic Impact Assessments (SIA) and compiling Environmental Management Plans (EMPs) in Namibia. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

DECLARATION OF INDEPENDENCE AND DISCLAIMER

The consultant herewith declare that this report represents an independent, objective assessment of the environmental impacts associated with the proposed northern beach development project.

I.N.K has prepared this report based on an agreed scope of work and acts in all professional matters as an independent environmental consultant to the Swakopmund Municipality and exercises all reasonable skill and care in the provision of its professional services in a manner consistent with the level of care and expertise exercised by members of the environmental profession.

I.N.K does not express an opinion as to the accuracy or completeness of the information provided, the assumptions made by the parties that provided the information or any conclusions reached. I.N.K has based this Report on information received or obtained, on the basis that such information is accurate and, where it is represented to I.N.K as such, complete.

I.N.K is not responsible and will not be liable to any other person or organisation for or in relation to any matter dealt within this report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in this report (including without limitation matters arising from any negligent act or omission of I.N.K or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in this report). This report must not be altered or added to without the prior written consent of I.N.K.

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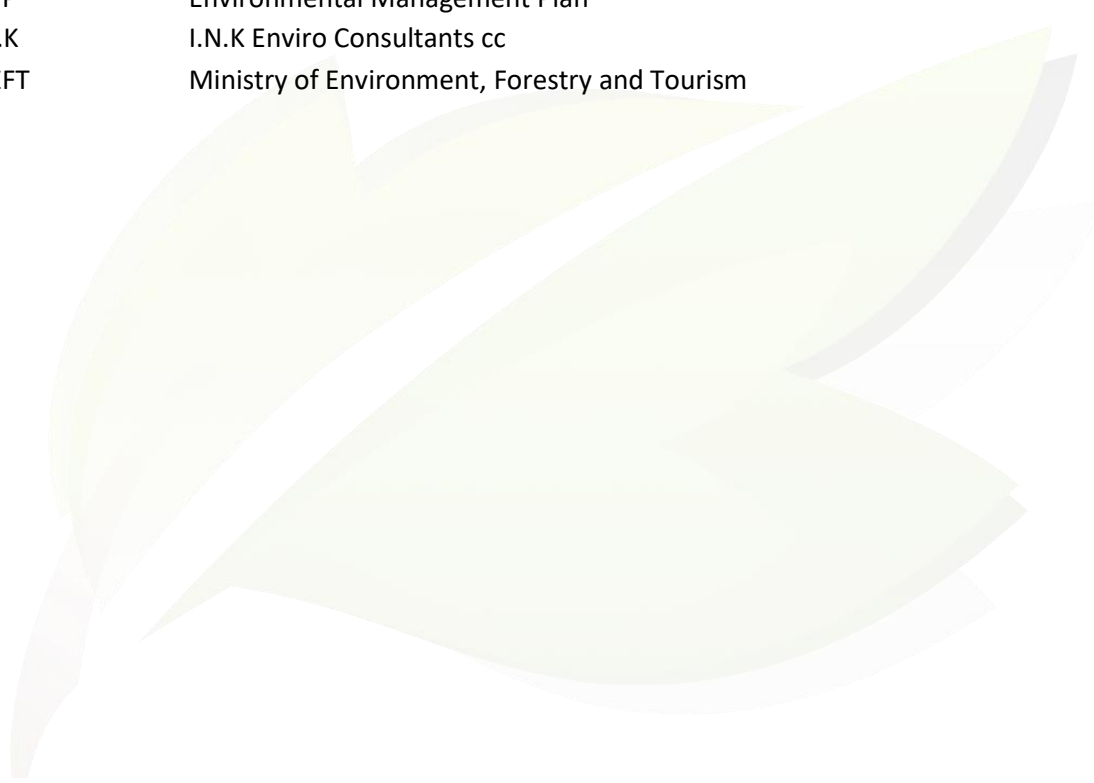
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LIST OF ACRONYMS, ABBREVIATIONS AND UNITS

DEA	Department of Environmental Affairs
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
I.N.K	I.N.K Enviro Consultants cc
MEFT	Ministry of Environment, Forestry and Tourism



1 INTRODUCTION

1.1 Introduction to the Proposed Project

The Swakopmund Municipality intends to develop the northern beach into a recreational (i.e., parks and recreational facilities) area for the purpose of improving the social, economic and environmental situation of the community at large and to enhance the quality of life for all Swakopmund residents and visitors.

The proposed project is located adjacent to (south) the Platz Am Meer Shopping Mall, in the Vineta residential area, Swakopmund, Namibia.

The proposed site and surrounding area is currently used for unconstrained and unregulated recreational activities. Therefore, the Swakopmund Municipality proposes to provide an improved/comprehensive recreational opportunity for all ages, ability levels, and provides safe, attractive, well maintained, well managed parks and recreation facilities.

The following activities and infrastructure components were identified for the development, enhancement and improvement of the Northern Beach:

- Parking bays;
- Beach Sports facility (volleyball, rugby, soccer, netball);
- Picnic park;
- Beach walkway;
- Ablution facilities;
- Community braai area;
- Fitness park; and
- Play park.

Prior to commencement of any construction activities relating to the proposed project, an Environmental Clearance Certificate (ECC) is required on the basis of an approved Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP). It is with this background that, I.N.K Enviro Consultants cc (I.N.K), an independent firm of consultants, was appointed to undertake the Environmental Impact Assessment process for this project.

1.2 Details of the persons who compiled this EMP

I.N.K Enviro Consultants cc is the independent firm of consultants that has been appointed by The Swakopmund Municipality to compile the EMP.

Immanuel N. Katali, the EIA project manager and lead practitioner holds a B.Arts (Honours) Degree in Geography, Environmental Studies and Sociology and has over six years of relevant experience in

conducting/managing EIAs, compiling EMPs and Socio-Economic Studies. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

1.3 Scope of EMP

The components of the EMP are included in Table 1: Content of the EMP below.

Table 1: Content of the EMP

EIA Regulation requirement	EMP Reference
Details of the persons who prepared the EMP and the expertise of those persons to prepare an environmental management plan.	Section 1.2
Information on any proposed management or mitigation measures to address the environmental impacts that have been identified in a report contemplated by these regulations, including environmental impacts or objectives in respect of – Planning and design Construction activities Operation or undertaking of the activity Rehabilitation of the environment	Section 2
An identification of the persons to be responsible for the implementation of the mitigation measures.	Sections 3
Proposed mechanisms for monitoring compliance with the EMP and reporting on it.	Section 3 & 4

2 ENVIRONMENTAL ACTION PLANS

The management measures proposed to mitigate the potential impacts relating to the construction and operation phase are detailed in the action plans below.

2.1 Action plans to achieve objectives and goals

Action plans to achieve relevant objectives/goals are listed in tabular format.

Table 2: Action Plan – Stakeholder Consultation/Communication Management Plan

Objective:

To ensure that regular communication is provided on the relevant activities, together with feedback on the environmental management performance of the beach facility and that opportunity is provided for interested and affected parties to continue to raise comments and concerns (complaints).

No	Issue	Management commitment
These commitments apply to <u>all phases</u> of the project		
1	Understanding who the stakeholders are	Maintain and update the Swakopmund Municipality stakeholder register. Ensure that all relevant stakeholder groups are included.
2		A representative database would include government, employees, service providers, contractors, local communities, NGOs and the media.
3	Liaison with interested and affected parties	Devise and implement a stakeholder communication and engagement strategy. Quarterly meetings with the immediate neighbouring communities will be carried out.
4	Cooperative working relationship with stakeholders	Keep identified stakeholders informed about the beach development's activities.
5		Use appropriate communication channels to consult with, and disseminate information to, the identified stakeholder groups.
6	Managing perceptions, issues and/or complaints	<p>Develop and implement a concerns/complaints (grievance) process for stakeholders and publicise the channels through which issues can be submitted to The Swakopmund Municipality.</p> <ul style="list-style-type: none"> • Document all complaints in an external communications register; • Respond immediately to acknowledge receipt of complaints and comments; • Investigate and report on findings of issue to the complainant; • Keep complete auditable records of complaints, responses and actions taken; and • Introduce an independent mediator if the grievance / complaint cannot be resolved between the municipality and the affected party.

Table 3: Action Plan – Air Quality Management Plan

Objective:

The objective of the management measures is to prevent unacceptable air quality related pollution impacts.

No	Issue	Management commitment
These commitments apply to the <u>construction</u> phase		
1	Dust, PM ₁₀ and other gaseous emissions	Demarcate/fence off construction activities.
2		Keep construction footprint to a minimum.
3		Ensure all construction equipment is subject to an Inspection & Maintenance programme to ensure proper combustion.
4		Should excessive dust be generated by construction activities then dust suppression should be considered.
These commitments apply to the <u>operations</u> phase		
5	Dust, PM ₁₀ and other gaseous emissions	Develop and implement a complaints register to record any 3rd party complaints relating to the release of dust from exposed areas. Complaints must be investigated and actions developed.

Table 4: Action Plan – Noise Management Plan

Objective:

The objective of the management measures is to limit excessive noise.

No	Issue	Management commitment
These commitments apply to <u>all</u> phases of the project		
1	Noise pollution	Noise-generating activities such as the braai area, will be limited to daytime hours (between 08h00-20h00) since noise impacts are most significant during the night.
2		Swakopmund Municipality will maintain good relations with the residents and have clear points of contact to enable a speedy response to complaints.
3		Ensure general construction activities follow good engineering practice including: <ul style="list-style-type: none"> ○ Enclosure of major sources of noise.

No	Issue	Management commitment
		<ul style="list-style-type: none"> Following of good design philosophies for vibrating structures that are known to be noisy.
4		Ensure Beach Warning and Safety signs include "No Loud Noise Allowed" instructions;
5		Ensure control measures are enforced on site to regulate the visitors from creating excessive noise that could be a nuisance to the residents
6		Minimise individual vehicle engine, transmission and body noise or vibration through the implementation of an equipment maintenance programme and minimise the need for trucks or equipment to reverse during construction.
7		When complaints are received of excessive noise, a noise monitoring campaign needs to be conducted to investigate and develop further mitigation, as required.
8		24/7 hours security personal must be placed on site to prevent any car boot parties from happening.

Table 5: Action Plan – Visual Disturbance and Sense of Place Management Plan

Objective:

The objective of the management measures is to limit visual impacts.

No	Issue	Management commitment
These commitments apply to <u>all phases</u> of the project		
1	Visual disturbance	No litter or waste accumulation will be permitted on site.
2		Ensuring that the operations and facilities are well maintained and kept in good order. Poor maintenance and housekeeping would result in the creation of a negative visual impact.
3		Plant trees around the infrastructure in order to beautify the place, as well as a way of screening the negative visual impact of the buildings.
4		Limit the heights of the buildings as much as possible
5		Ensure the paint of the buildings such as toilets are of a natural colour and not bright colours which are commonly seen as unattractive colours in the natural environment.

No	Issue	Management commitment
6		Ensuring that the operations and facilities are well maintained and kept in good order. Poor maintenance and housekeeping would result in the creation of a negative visual impact.
7		Plant trees around the infrastructure in order to beautify the place, as well as a way of screening the negative visual impact of the buildings.

Table 6: Action Plan –Archaeology Management Plan

Objective:

To ensure that the correct actions are taken to preserve or document chance archaeological finds.

No	Issue	Management commitment
These commitments apply to <u>all phases</u> of the project		
1	Chance Find Procedure	<p>The “chance finds” procedure covers the actions to be taken from the discovery of a heritage site or item, to its investigation and assessment by a trained archaeologist or other appropriately qualified person.</p> <p><u>Action by person identifying archaeological or heritage material:</u></p> <ul style="list-style-type: none"> • If operating machinery or equipment - stop work; • Identify the site with flag tape; • Determine GPS position if possible; and • Report findings to foreman. <p><u>Action by foreman:</u></p> <ul style="list-style-type: none"> • Report findings, site location and actions taken to superintendent; and • Cease any works in immediate vicinity. <p><u>Action by superintendent:</u></p> <ul style="list-style-type: none"> • Visit site and determine whether work can proceed without damage to findings; • Determine and mark exclusion boundary; and • Site location and details to be added to project GIS for field confirmation by archaeologist. <p><u>Action by archaeologist:</u></p> <ul style="list-style-type: none"> • Inspect site and confirm addition to project GIS;

No	Issue	Management commitment
		<ul style="list-style-type: none"> Advise NHC and request written permission to remove findings from work area; and Recovery, packaging and labelling of findings for transfer to National Museum. <p><u>In the event of discovering human remains:</u></p> <ul style="list-style-type: none"> Actions as above; Field inspection by archaeologist to confirm that remains are human; and Advise and liaise with NHC and Police.
2	Training	All workers (temporary and permanent) should be given training on the chance find procedure.

Table 7: Action Plan – Social and Economic Management Plan

Objective:

The objective of the management measures is to enhance the positive impacts associated with job creation and investment.

No	Issue	Management commitment
These commitments apply to <u>all phases</u> of the project		
1	Enhance positive socio-economic impacts	<p>Local people must be preferentially selected to encourage social growth and development in the region and Namibia as a country.</p> <p>Management is urged to begin local selection and provide technical training as soon as possible to enable local people to compete for the lower skilled jobs and upskill themselves in anticipation of the proposed project.</p>
2	Employees/Contractors (Social issues)	Have zero tolerance to alcohol in the workplace.
3		Contractors are not allowed to camp at the construction sites.
4		A First Aid Kit should be available at all times during the construction process.

Table 8: Action Plan – Waste Management Plan

Objective:

The objective of the management measure is to appropriately manage general waste.

No	Issue	Management commitment
These commitments apply to <u>all phases</u> of the project		
1	Waste Management	Better signage and awareness creation for the visitors of the facility to dispose of their waste in bins and not in the open environment.
2		Ensure suitable receptacles with lids for waste disposal is available on site at all times.
3		Ensure animals do not have access to waste bins.
4		If rubbish containers are used, ensure these can be sealed from animals or strong wind and during transportation.
5		Waste shall be transported to the nearest waste disposal site on a weekly basis.
6		No disposal of waste on site and no burning of waste.
7		Written evidence of safe disposal of waste will be kept.

Table 9: Action Plan – Hydrocarbons and Associated Spills Management

Objective:

The objective of the management measure is to appropriately manage hydrocarbon spills.

No	Issue	Management commitment
These commitments apply to the construction phase		
1	Hydrocarbon Spills Management	Vehicles, machinery and equipment shall be kept in good working condition to ensure they do not leak oil/diesel.
2		Vehicles and machinery will be serviced off site as far as possible. However, in the event where machinery needs to be repaired/serviced on site all care shall be taken to prevent spillage of oil/diesel by performing the work on impermeable surfaces or proper placement of drip trays.
3		Regular environmental awareness should include potential risks associated with hydrocarbons.

No	Issue	Management commitment
4		All refuelling of vehicles will take place off site
5		Establish and maintain impermeable bunded / drip trays around diesel generators.
6		Regular environmental awareness should include potential risks associated with hydrocarbons.
7		Any spills will be contained and cleaned up immediately
8		Spill kits will be readily available on site. Employees and/or contractors will be shown how to use the spill kits to enable containment and remediation of pollution incidents.
9		The contractor will establish environmental awareness to employees
10		Soil contaminated with hydrocarbons shall be excavated and stored in plastic bags inside a designated wheelie bin and transported for disposal at the nearest disposal facilities in the towns.

Table 10: Action Plan – Traffic Management

Objective:

The objective of the management measure is to appropriately manage traffic impacts.

No	Issue	Management commitment
These commitments apply to the construction phase		
1	Traffic Impact	Proper care should be taken when turning into Mowen street from the main road. Signage should be placed to clearly indicate the speed limit when entering the site. All drivers must adhere to the speed limit when entering the site.
2		Ensure appropriate speed reducing measures (i.e., speed bumps) are in place in Mowen Street.
3		Ensure implementation of a detailed safety code of conduct for contractor; to be closely monitored with penalties enforced if necessary.
4		Ensure the trucks during construction keep their distance from one another, to allow other road users to pass safely.
5		Ensure that an Emergency Response Plan is in place, in event of an accident.
6		Ensure dust suppression methods such as sprinkling water on the gravel road is done at all times to limit the impact of dust on the neighbouring community

Table 11: Action Plan – Rehabilitation

Objective:

The objective of the measures is to rehabilitate the construction sites to as close an approximation of the pristine state as is technically, financially and reasonably possible.

No	Issue	Management commitment
These commitments apply to the construction phase		
1	Rehabilitation	All construction sites should be photographed (1) before commencement, (2) after completion and (3) after rehabilitation of the activities.
2		All unused equipment and material will be removed from all sites;
3		All litter from the construction sites will be taken to an appropriate disposal site.
4		All debris, scrap metal, etc. will be removed.
6		All small ditches/ trenches will be covered and contoured.
5		Impacted footprints outside the site are to be raked
6		Inspect to ensure rehabilitation measures are implemented

3 PARTIES RESPONSIBLE FOR THE IMPLEMENTATION OF THE EMP

This section describes the roles and responsibilities for implementing the different parts of the environmental management plan (EMP).

3.1 Supervisor

The Supervisor has overall responsibility for environmental management and safety during the operation process of the beach facility and shall oversee the implementation of the EMP.

The Supervisor's responsibilities relating to compliance with this EMP:

- Regular inspections of compliance to this EMP and any other relevant legal requirements.
- Regular correspondence with the DEA on environmental issues and incidents.
- Conduct environmental awareness training during induction training and on an ad hoc basis thereafter to all workers.
- Ensure compliance to all facility rules
- Ensure that staff is controlled through the implementation of appropriate security measures.
- Carefully manage the handling of hydrocarbon material.
- Monitor for excessive dust and noise levels and implement control measures if necessary.
- Report incidences to the DEA.
- Implement a waste management strategy.
- Monitoring and maintenance of equipment and machinery.
- Implement an environmental awareness plan.
- Implementation of first-aid procedures.

4 TRAINING AND AWARENESS

The purpose of the job specific environmental awareness training is to ensure that employees/all staff are equipped to implement the actions committed to in the EMP. The staff involved in operations will receive training regarding the requirements of this EMP.

Four main forms of training will be provided on the premises:

- Beach facility induction
- Environmental management training – general and targeted

The training will generally be prepared by the Supervisor (or the Environmental Representative).

The following will be done to ensure all employees, contractors, suppliers and visitors receive the appropriate training/awareness:

4.1 Environmental Induction

All new members of staff receive a corporate Environmental Induction along with the obligatory Health & Safety induction. The induction gives a general overview of the environmental challenges faced by the project, how we are managing them, and general tips for reducing our impact in the workplace.

The main reason for environmental induction is to encourage new staff to be environmentally aware right from the beginning of their employment. This will ensure that environmental initiatives are successful by eliminating bad habits from the start.

Before working at the facility, all personnel and sub-contractors will undertake a facility induction incorporating environmental requirements. The induction will address a range of environmental awareness issues specific to the construction process of the project.

As a minimum, training shall include:

- Explanation on the importance of complying with the EMP and environmental implications should the EMP not be effectively implemented.
- Explanation of the facility rules.
- Discussion of the potential environmental impacts of activities, recognition of environmental risks and how to control these risks.
- The benefits of improved personal performance, understanding of what to do in case of an environmental event or exposure.
- Employees' roles and responsibilities, including emergency preparedness.
- Explanation of the mitigation measures that must be implemented when carrying out operational activities.
- Explanation of the requirements of the EMP and its specification.
- Explanation of the management structure of individuals responsible for matters pertaining to the EMP.

4.2 Environmental Awareness training

Targeted environmental management training will be provided to individuals or groups of workers with a specific authority or responsibility for environmental management or those undertaking an activity with a high risk of environmental impact. This environmental training will aim to achieve a level of awareness

and competence appropriate to their assigned activities. This training will take place at the beginning of operations.

