ENVIRONMENTAL MANAGEMENT PLAN

PROPOSED REZONING OF PORTION REMAINDER 18 (A PORTION OF PORTION 16) AND 22 (A PORTION OF POTION 18) OF THE FARM BRAKWATER NO. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' LAND USE

AUGUST 2025

URBAN Green
SUSTAINABILITY CONSULTANTS

PROJECT INFORMATION

Proponent:	**WP TRANSPORT (PTY) LTD**
Project Title:	**PROPOSED REZONING OF PORTION REMAINDER 18 (A PORTION OF PORTION 16) AND 22 (A PORTION OF POTION 18) OF THE FARM BRAKWATER NO. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' LAND USE**
Type of Project:	**ENVIRONMENTAL SCOPING ASSESSMENT**
Project Location:	**BRAKWATER, WINDHOEK – KHOMAS REGION (NAMIBIA)**
Project Number:	**WHK/BRAK/18&22/BRAK**
Competent Authority:	**MINISTRY OF URBAN AND RURAL DEVELOPMENT** **PRIVATE BAG 13299** **WINDHOEK** **NAMIBIA**
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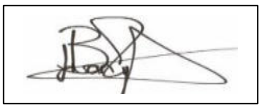

EMP REVISION STATUS

Version	Date Approved	Revision Details
V1 – Original Operational EMP		

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APPENDICES

LIST OF ACRONYMS

A	Ampére
BID	Background Information Document
CoW	City of Windhoek
Cº	Celsius
dB	Decibel
DEA	Directorate of Environmental Affairs
DR	District Road
DSR	Draft Scoping Report
DWAF	Department of Water Affairs and Forestry
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate

ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
ESP	Environmental Structure Plan
etc.	Etcetera
FSR	Final Scoping Report
Ha	Hectare
IEO	Independent Environmental Officer
I&AP	Interested and Affected Party
km	Kilometre
km/h	Kilometres per hour
kVA	Kilowatts Ampère
l	Litre
MAWF	Ministry of Agriculture, Water and Forestry
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
MET	Ministry of Environment and Tourism
MET	Ministry of Environment and Tourism
m^3	Cubic metres
mg	Milligram
mm	Millimetre
No	Number
Ptn	Portion
PPP	Public Participation Process
Re/	Remainder
RoW	Right of Way
SA	South Africa
SABS	South African Bureau of Standards
SANS	South African National Standards
ToR	Terms of Reference
TDS	Total Dissolved Solids
WTPS	Windhoek Town Planning Scheme
WWTP	Waste Water Treatment Plant

GLOSSARY

The definitions given below are for explanatory purposes only.

Activity	The physical work that a Proponent proposes to construct, operate, modify, decommission, or abandon or an activity that a Proponent proposes to undertake.
Alien Species	It refers to a non-indigenous plant, animal or micro-organism; or an indigenous plant, animal or micro-organism, translocated or intended to be translocated to a place outside its natural range of nature, that does not normally interbreed with individuals

	of another kind, including any subspecies cultivar, variety, geographic race, strain, hybrid or geographically separate population.
Alternatives	A possible course of action, in place of another, that would meet the same purpose and need but which would avoid or minimize negative impacts or enhance project benefits. These can include alternative locations/sites, routes, layouts, processes, designs, schedules and/or inputs. The "no-go" alternative constitutes the 'without project' option and provides a benchmark against which to evaluate changes; development should result in net benefit to society and should avoid undesirable negative impacts.
Assessment	The process of identifying, predicting, and evaluating the significant effects of activities on the environment; and the risks and consequences of activities and their alternatives and options for mitigation with a view to minimise the effects of activities on the environment.
Audit	Regular inspection and verification of activities for implementation of the EMP.
Bulk Supply	The wholesale supply of i.e. water on a business-orientated basis, in large quantities, whether in treated or untreated form, for any utilisation purpose to a customer for own use or for subsequent supply by the customer to consumers.
Bund	An enclosure designed to hold at least 120% of the contents of a liquid storage vessel, tank, or drums to contain any spillage.
Competent Authority	A body or person empowered under the local authorities act or Environmental Management Act to enforce the rule of law.
Contaminated Water	Water contaminated by the Contractor's activities, e.g. concrete water, and runoff from plant/personnel wash areas.
Critically Endangered (IUCN)	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered (see Section V of the IUCN Red List Categories and Criteria), and it is therefore considered to be facing an extremely high risk of extinction in the wild.
Cumulative Impacts	In relation to an activity, means the impact of an activity that in itself may not be significant but may become significant when added to the existing and potential impacts eventuating from similar or diverse activities or undertakings in the area.
Emergency Situation	An incident, which potentially can significantly impact on the environment, and which, could cause irreparable damage to sensitive environmental features. Typical situations entail amongst others the: • Spill of petroleum products and lubricants into the aquatic system.

	• Potential damage, erosion and slumping of unstable river embankments or drainage channels. • Potential event of impeding the continuous flow of water to downstream water user's dependant on the flow; and Dangerous situation where livestock and children can be injured by any activity emanating from the construction or rehabilitation of the project implementation.
Endangered (IUCN)	A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered (see Section V of the IUCN Red List Categories and Criteria), and it is therefore considered to be facing a very high risk of extinction in the wild.
Environment	As defined in the Environmental Assessment Policy and Environmental Management Act - "land, water and air; all organic and inorganic matter and living organisms as well as biological diversity; the interacting natural systems that include components referred to in sub-paragraphs, the human environment insofar as it represents archaeological, aesthetic, cultural, historic, economic, paleontological or social values".
Environmental Impact Assessment (EIA)	The process of examining the environmental effects of a development as prescribed by the Environmental Impact Assessment Regulations (GN. No. 30 of 2012) for activities listed as List of Activities which may not be undertaken without an Environmental Clearance Certificate from the Environmental Commissioner (GN. No. 29 of 2012).
Environmental Management Plan (EMP)	A working document on environmental and socioeconomic mitigation measures, which must be implemented by the Proponent.
Evaluation	The process of ascertaining the relative importance/significance of information, in light of people's values, preference and judgements in order to make a decision.
Hazardous Substance	A substance that, in the reasonable opinion of the IEO, can have a harmful effect on the environment.
Independent Environmental Officer (IEO)	A suitably qualified professional independent from the Proponent who oversees the economic activities on-site and ensure that all environmental specifications and EMP obligations are met. The IEO will be responsible for the monitoring, reviewing, and verifying of compliance with the EMP by the Proponent.
Interested and Affected Party (I&AP)	Any person, group of persons or organisation interested in, or affected by an activity; and any organ of state that may have jurisdiction over any aspect of the activity.

Listed Activity	An activity listed in terms of section 27(2) of the Environmental Management Act and the List of Activities which may not be undertaken without an Environmental Clearance Certificate from the Environmental Commissioner (GN. No. 29 of 2012).
Mitigate	The implementation of practical measures to reduce adverse impacts.
Monitoring	Regular inspection and verification of construction activities for degree of compliance to the EMP.
No-Go Areas	Areas identified as being environmentally sensitive in some manner and demarcated on plan, and on the Site with pegs or fencing and which are out of bounds to unauthorised persons. Authorisation must be obtained prior to entry.
Site Manager	The person(s) who represents the Proponent on-site and are responsible for the technical and contractual implementation of the activities to be undertaken.
Proponent:	Any person who has submitted or intends to submit an application for an authorisation, as legislated by the Environmental Management Act no. 7 of 2007, to undertake an activity or activities identified as a listed activity or listed activities; or in any other notice published by the Minister or Ministry of Environment, Forestry & Tourism.
Public	Citizens who have diverse cultural, educational, political and socio-economic characteristics. The public is not a homogeneous and unified group of people with a set of agreed common interests and aims. There is no single public. There are a number of publics, some of whom may emerge at any time during the process depending on their particular concerns and the issues involved.
Safety, Health, Environment and Quality Officer (SHEQ Officer)	It is a suitably qualified environmental officer appointed by the Proponent who oversees the on-site daily health and safety and environmental responsibilities and overall quality control.
Scoping Process	Process of identifying: issues that will be relevant for consideration of the application; the potential environmental impacts of the proposed activity; and alternatives to the proposed activity that are feasible and reasonable.
Search and Rescue	The location and removal of specified plant species, without unnecessary damage, and their transfer to a specified location (on-site nursery).
Significant Effect/Impact	Means an impact that by its magnitude, duration, or probability of occurrence may have a notable effect on one or more aspects of the environment.

Solid Waste	All solid waste, including construction debris, chemical waste, excess cement/concrete, wrapping materials, timber, tins and cans, drums, wire, nails, food, and domestic waste.
Species of Special Concern	Those species listed in the Endangered, Threatened, Rare, Indeterminate, or Monitoring categories of the South African Red Data Books, and/or species listed in Globally Near Threatened, Nationally Threatened or Nationally Near Threatened categories (Barnes, 1998).
Specification	A technical description of the standards of materials and workmanship that the Proponent is to use in the works to be executed, the performance of the works when completed and the way payment is to be made.
Topsoil	The top 150 mm of soil (topsoil) and root material of cleared vegetation.
Works	The construction operations and all related and incidental works, such as search and rescue, fencing and rehabilitation, in connection with the execution and carrying to completion of the project.

1 BACKGROUND INFORMATION

This chapter of the EMP provides the necessary background information to the Project Site and its proposed rezoning, economic activities and the receiving environment, which is presented in much detail in the Environmental Scoping Report dated August 2021.

This EMP should be read along with the Environmental Scoping Assessment Report (November 2021).

1.1 PROJECT OVERVIEW

It is the intention of WP Transport (Pty) Ltd., the Owner (hereafter referred to as the Proponent) of Portion Remainder 18 (a Portion of Portion 16) and 22 (a Portion of Portion 18) of the Farm Brakwater No. 48 (hereafter referred to as Portion 18 and 22 or the Project Site) to Rezone the properties from 'Residential' to 'Industrial' land use. The properties are adjacent to one another.

With the transaction whereby WP Transport (Pty) Ltd was taken over by Imperial Logistics, it was determined that the mentioned properties are still listed as 'residential', although it has been developed and used for industrial purposes for several years now. The properties are registered in WP Transport's name

1.1.1 PROJECT SITE LOCALITY

The two portions to be rezoned is located on the farm Brakwater No. 48, situated within the central-eastern parts of the larger Brakwater area in the Khomas Region. It is approximately 10 km north of the capital city Windhoek directly east of the B1 main road between Windhoek and Okahandja. (Refer to Appendix A for the Locality Map). Portions 18 and 22 are situated next to each other just south of NamPower's Brakwater Depot, east of the TransNamib railway and its servitude and directly on the western banks of the Klein Windhoek River.

1.1.2 PROJECT SITE ACTIVITIES

Development and Construction already took place in recent years on both properties. No further construction is envisaged at this stage and this Operational EMP is only applicable to the environmental management of the day-to-day activities associated with the Project Site.

Portion 18 is currently being used by Imperial Logistics, who has taken over WP Transport, as a truck depot. It accommodates structures of a residential as well as industrial nature. On this erf is the original residential house and offices with lots of parking space, a warehouse with offices, a workshop, wash bay, filling station, ablution in a container, domestic quarters and vast storage

space for trucks, trailers, tanks and containers. This area is fenced in by security fencing, leaving a portion unaffected.

Portion 22 is being rented by Cerebos to use as a salt packaging factory since 2018. The structures on this erf are of industrial nature. On this premise is a warehouse with offices, an ablution container and a vast open area where bulk salt bags are stacked and where loading trucks can park.

1.2 THE RECEIVING ENVIRONMENT

1.2.1 THE PHYSICAL ENVIRONMENT

The Brakwater area is situated within the Khomas Hochland Plateau, which determines the particular bio-physical environment (see section 5.1. of the Environmental Scoping Report, August 2021). The larger Brakwater area is characterised by the rugged higher lying undulating mountainous zone situated to the east and west and the central lying lower lying lowlands. The Project Site is located central within this larger valley bounded by faults that form the Windhoek Basin. The properties are located on the western bank of the Klein Windhoek River.

The drainage forms part of the Swakop River catchment and downstream usage includes farm boreholes, the Swakop River alluvial aquifer and the Swakoppoort Dam.

Groundwater potential is generally poor, but can be moderate along the river courses. Away from the river courses recharge is limited, resulting in elevated salinity of the groundwater. The river alluvium therefore forms an important recharge source to aquifers locally and downstream.

1.2.2 THE BIOPHYSICAL ENVIRONMENT

The larger Brakwater area forms part of the *Thornbush Savannah.* This is the dominant vegetation type in Namibia. The dominant vegetation structure is *Acacia* shrublands. (A description is presented in section 5.2 of the Environmental Scoping Report, August 2021).

The properties have already been cleared of natural vegetation during previous construction, except for the southern portion of Portion 18 that is outside the security fence. This area is mostly covered with *Eragrosti biflora* that grows under trees or in shady patches in disturbed places and populous *Prosopis* trees with solitary *Eucalyptus* trees here and there. Both tree species are alien invasive species. (Refer to section 5.2.1 of the Environmental Scoping Report, August 2021)

The *Thornbush savannah* supports a variety of birds and ground dwelling animals. In the Brakwater area these are mostly limited to smaller rodents, hares and reptiles. It can be expected that the riparian vegetation next to the properties provides habitat to a variety of bird species. (Refer to section 5.2.2 of the Environmental Scoping Report, August 2021)

1.2.3 LAND USE AND INFRASTRUCTURE

Land uses within the immediate vicinity of the project site are mostly of an industrial nature. Industrial, commercial and business-like activities are concentrated along the central lying service corridors (B1 National Highway, TransNamib railway line; NamWater pipeline, and NamPower electricity grid) defined by the Klein Windhoek River to the east and the Brakwater Service Road (DR 1491) to the west, stretching along the B1 north to south. (see section 3.5 of the Environmental Scoping Report, August 2021).

The properties north of the Project Site belongs to NamPower where they established their Brakwater Depot. The southern side of NamPower's property that borders the Project Site is used for its open camp storage facility where the wooden poles for powerlines and its maintenance are kept.

The property to the west belongs to TransNamib that accommodates the railroad and its servitude, including a servitude for a station. A piece of this property was made available by TransNamib to develop a brick factory. This factory is currently abandoned and not in use.
To the south are a few small holdings with residential buildings and livestock accommodation.
The Klein Windhoek River borders on the Project Site's eastern side.

2 THE ENVIRONMENTAL MANAGEMENT PLAN

2.1 PURPOSE OF THE EMP

The purpose of the EMP is to provide specifications for "good environmental practice" in a sensitive riverine environment for application during operation of economic activities on-site.

As such, the EMP provides specifications that the Proponent must adhere to, to minimise adverse environmental impacts associated with the on-site activities. The Proponent to which authorisation was granted, is ultimately responsible for overall environmental performance.

The guidelines for the execution of an EMP include the following:

- Responsibilities for the environmental performance which are delegated to the appropriate staff;
- Communications channels to report on environmental performance, problems and priorities;
- Monitoring schedules to identify potential negative environmental impacts associated with the on-site activities;
- Mitigation measures to be implemented to avoid or minimise the identified negative environmental impacts (Soil, Surface and Ground Water Pollution, Health, Safety and Security, Traffic safety, Noise and vibration; Dust and Emissions) as well as to enhance the positive impact on the environment (employment; support of local businesses, conservation efforts); and
- Monitoring programme to track the plans that have been implemented to ensure the effectiveness of the plan.

2.2 SCOPE OF THE EMP

In order to ensure a holistic approach to the management of environmental impacts, this EMP sets out the methods by which proper environmental controls are to be implemented by the Proponent and all other parties involved, and monitored by the Independent Environmental Officer (IEO).

This EMP intends to guide and manage the operational activities and surrounding areas as they relate to the natural environment. It describes mitigation measures and is prescriptive in identifying specific people or organisations to undertake specific tasks. This document must further be open-ended, requiring regular review and updating via the correct channels for it to effectively guide environmental management of this project.

The provisions of this EMP are binding on the Proponent until the end of project life. Any third party appointed by the Proponent in terms of operations, design or construction of any additions/alterations on/to the Project Site must comply with the conditions of this EMP.

This EMP has been designed to suite the on-site economic activities and operations, and incorporates the following:

- General mitigation measures;
- Specific mitigation measures for certain activities;
- Operational activities that could impact on the environment;
- Specifications with which the Proponent must comply to protect the environment from the identified impacts; and
- Actions that shall be taken in the event of non-compliance.

The EMP is a dynamic document subject to similar influences and changes as are created by variations to the provisions of the operations specification. Any substantial changes shall require the approval from the Independent Environmental Officer (IEO).

2.3 FORMAT OF THE EMP

The EMP consists of four parts:

- **Chapter 1** gives **Background** information on the Project Site and the receiving environment;
- **Chapter 2** contains a brief **description of the EMP**, i.e. purpose, scope, format and amendments;
- **Chapter 3** deals with **Compliance Monitoring** stipulating the general requirements, responsibilities of the different role players, financing of environmental control, dispute resolution, and requirements for monitoring; and
- **Chapter 4** details with the **Environmental Specifications** that set out the environmental objectives and targets with which the Proponent shall comply.

2.4 AMENDMENTS TO THE EMP

Changes can be made to the EMP and this must be made via the IEO. Approved changes will be recorded and drafted into this existing EMP in the form of an appendix or amendments. This should be clearly stipulated in the EMP to avoid confusion.

3 ADMINISTRATION AND REGULATION OF ENVIRONMENTAL OBLIGATIONS (COMPLIANCE MONITORING)

3.1 MANAGEMENT STRUCTURE

Details of the management structure are presented below. All official communication and reporting lines including instructions, directives and information shall be channelled according to the organisational structure presented below.

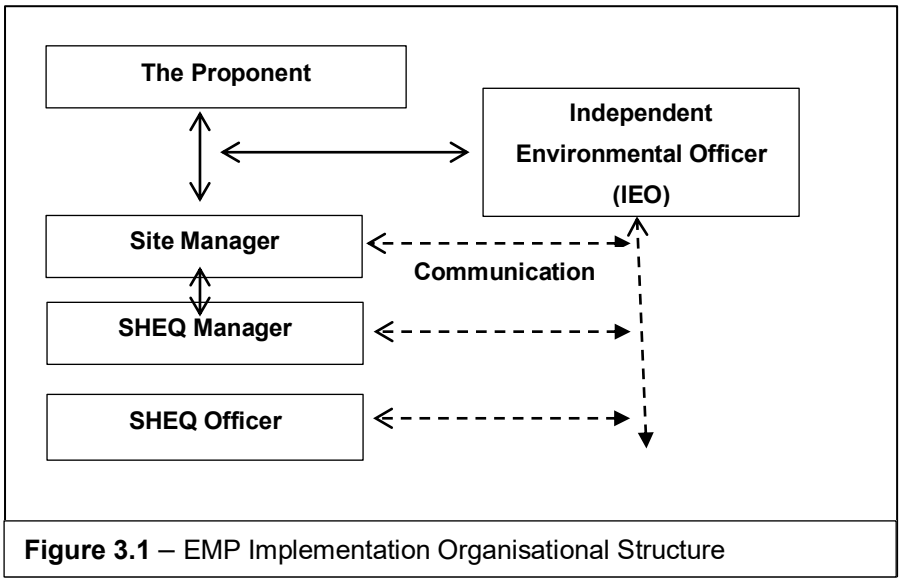


Figure 3.1 – EMP Implementation Organisational Structure

3.2 ROLES AND RESPONSIBILITIES

The implementation of this EMP requires the involvement of several stakeholders, each fulfilling a different but vital role to ensure sound environmental management.

3.2.1 PROPONENT (WP TRANSPORT (PTY) LTD)

The Proponent is ultimately responsible for the implementation of the EMP and the financial cost of all environmental control measures. The Proponent must ensure that any person acting on their behalf complies with the conditions/specifications contained in this EMP. The Proponent is also responsible for the appointment of a Site Manager, a Safety, Health, Environment and Quality Manager and Officer (SHEQ) and Independent Environmental Officer (IEO).

The Proponent shall address any site problems pertaining to the environment at the request of the SHEQ Manager and/or the IEO.

3.2.2 SITE MANAGER

The Site Manager shall be responsible for the management of the general on-site operational activities. Any on-site decisions pertaining activities having relevance to environmental matters are ultimately the responsibility of the Site Manager.

The Site Manager shall assist the SHEQ Manager/Offer and IEO where necessary and shall have the following responsibilities in terms of the implementation of this EMP:

- The Site Manager, along with the SHEQ Manager/Officer and IEO, must obtain, examine and approve Method Statements.
- Assist the SHEQ Manager/Officer and IEO in making decisions and finding solutions to environmental problems that may arise during operational activities.
- Issue instructions requested by the IEO to the Personnel.
- Deduct environmental penalties from payments as agreed and instructed by the IEO.
- Oversee the responsibilities of the SHEQ Manager/Officer and Personnel, and assist in all required environmental matters.
- Ensure that no damage whatsoever is caused because of operations or otherwise by Personnel on the Project site and in the areas adjacent to it.
- Order the removal of person(s) and/or equipment not complying with the EMP specifications.
- Provide input into the SHEQ Manager/Officer and IEO's on-going internal review of the EMP.
- Communicate environmental issues to the IEO.
- The Site Manager will ultimately be held liable for all unauthorised damage caused by on-site activities.

3.2.3 SAFETY, HEALTH, ENVIRONMENT AND QUALITY MANAGER AND OFFICER

The SHEQ Officer, under the management of the SHEQ Manager, will address any site problems pertaining to the environment at the request of the Proponent, Site Manager and/or the IEO as part of their duties. The SHEQ Manager and Officer shall have the responsibility to ensure that the Proponent's responsibilities are executed in compliance with the EMP and/or any other documentation regarding Safety, Health, Environment or Quality Control proposed from the Proponent and/or IEO. The SHEQ Manager and Officer shall assist the IEO where necessary and shall have the following responsibilities in terms of the implementation of this EMP:

- Implement and monitor that all provisions of the EMP are always adhered to and act if specifications are not followed. If the SHEQ Manager/Officer encounters difficulties with the specifications, he/she must discuss alternative approaches with the Site Manager and/or IEO prior to proceeding.
- Communicate environmental issues to the Site Manager and IEO.

- Obtain, examine and approve Method Statements, along with the Site Manager and IEO.
- Monitor and verify that the environmental impacts are kept to a minimum and mitigations proposed are applied throughout.
- Make and keep Personnel aware of environmental issues and ensure they show adequate consideration to the environmental sensitivities.
- Report person(s) and/or equipment not complying with the EMP specifications to the Site Manager.
- Report any incidents of non-compliance with the EMP to the Site Manager and/or the IEO.
- Conduct on-going internal review of the EMP.
- Keep a register of incidence on-site and note date and action taken.
- Keep a register of complaints on-site and record community comments and issues, and the actions taken in response to these complaints.
- Rehabilitate any sensitive environments damaged due to negligence. This shall be done in accordance with the Site Manager and IEO specifications and instructions.
- The SHEQ Team shall ensure that Personnel are properly instructed and carry out the requirements of this EMP.

Failure to comply with the EMP from the side of the Personnel may result in penalties and reported non-compliance may result in the suspension of work or termination of the contract by the Site Manager on instruction from the Proponent.

3.2.4 INDEPENDENT ENVIRONMENTAL OFFICER (IEO)

The Independent Environmental Officer (IEO) is acting on behalf of the Proponent and shall communicate directly with the Proponent, Site Manager and/or SHEQ Manager. The IEO shall be responsible for monitoring, reviewing, and verifying the Proponent's compliance with the EMP. The IEO shall have the right to investigate the site at any time and unexpected visits will be allowed.

The IEO duties shall include, inter alia, the following:

- The IEO shall make recommendations in consultation with the Site Manager and SHEQ Manager and take immediate action on Site when
  - (i) prescriptive conditions are violated, or in danger of being violated, and to inform the Proponent, Site Manager and SHEQ Manager immediately of the occurrence and to take action, e.g. issuing of penalties; and

(ii) where clearly defined and agreed procedures are violated, or in danger of being violated, and to inform the Proponent, Site Manager and SHEQ Manager of the occurrence and action taken.

- Advise the Site Manager and/or the SHEQ Manager on environmental issues within the project area.
- Undertake regular site visits to ensure compliance with the EMP and verify that environmental impacts are kept to a minimum (i.e. operational monitoring).
- Keep a photographic record of progress on site from an environmental perspective.
- Assist the Site Manager and/or the SHEQ Manager in finding environmentally acceptable solutions to operational problems as and if any arise.
- Recommend additional environmental protection measures should this become necessary.
- Keep a register of complaints and dealing with any community issues or comments.
- Report any incidents to the Site Manager and SHEQ Manager that may or have caused damage to the environment or which is in breach of the EMP.
- Prepare an environmental audit report at the end of the Environmental Clearance Certificate expiry date.
- The IEO, along with the Site Manger and SHEQ Manager, must obtain, examine and approve Method Statements.
- Ordering the removal of, or issuing penalties for person/s and/or equipment not complying with the specifications of the EMP.
- Involve specialists to advise on environmental management issues as they emerge during the operational phase.

The IEO must have:

- a good working knowledge of all relevant environmental policies, legislation, guidelines and standards;
- the ability to conduct inspections and audits and to produce thorough and informative reports;
- the ability to manage public communication and complaints;
- the ability to think holistically about the structure, functioning and performance of environmental systems; and
- proven competence in the application of the following integrated environmental management tools:
    - EIAs.
    - EMPs.
    - Environmental auditing.

- Mitigation and optimisation of impacts.
- Monitoring and evaluation of impacts.

3.3 DISPUTES AND DISAGREEMENTS

Any disputes or disagreements between role players on Site (regarding environmental management) will be referred to the IEO, who will consult the Directorate of Environmental Affairs (Ministry of Environment and Tourism) if necessary. If no resolution on the matter is possible it must be presented to an outside party agreed by all parties involved.

3.4 EMP MONITORING RESPONSIBILITIES

The day-to-day monitoring and verification that the EMP is being adhered to shall be undertaken by the SHEQ Officer, under management of the SHEQ Manager.

The IEO shall visit and inspect the site at least twice a year to ensure that correct operational procedures are being implemented and that the Proponent is complying with the environmental specifications of the EMP.

Additional site inspections by the IEO may be required during the initial stages of implementation of the EMP. The IEO shall address any queries to the Site Manager and/or SHEQ Manager or Officer. If the queries cannot be resolved at this level, they shall be referred to the Proponent, if necessary.

- The SHEQ Officer will carry the responsibility of monitoring the implementation of the EMP on Site, under management of the SHEQ Manager and assisted by the IEO. In this regard, the IEO will submit a monitoring report to the DEA.
- Regular meetings will be held between the Site Manager, SHEQ Manager/Officer and the IEO. The purposes of the meetings shall be:
  - To establish the suitability of the Proponent's methods and operations to lower the risk involved for the environment.
  - To discuss possible non-conformance to EMP guidelines or environmental legislation.
  - To assess the general state of the environment on site and discuss any environmental problems which may have materialised.

Any non-compliance with the agreed procedures of the EMP is a transgression of the various statutes and laws that define how the environment is managed. Non-conformance identified during monitoring must be recorded. Non-conformance reports will describe, in detail, the cause, nature and effects of any environmental non-conformance by the Proponent and could stand as evidence should legal action be required. If possible, photographs should also be included as evidence to substantiate the report. This report will also suggest mitigation measures to correct the non-conformance (if necessary) and contemplate revisions to any of the strategies used in the operational phase, whether they pertain to monitoring or to operation methods used on site. The non-conformance shall be documented and reported as part of the Monitoring Report.

3.5 ENVIRONMENTAL AUDITS

An environmental audit must be carried out by the IEO every year to fulfil the conditions of this EMP and handed in with the Ministry of Environment, Forestry and Tourism after three years to renew the Environmental Clearance Certificate.

3.6 ENVIRONMENTAL COMPLETION STATEMENT

An Environmental Completion Statement will be prepared by the IEO for submission to the Department of Environmental Affairs indicating completion of operations and compliance with the EMP and conditions. This statement will be prepared after the final environmental audit.

3.7 NON-COMPLIANCE AND PENALTIES

The IEO shall issue the Proponent a notice of non-compliance whenever transgressions are observed. The Proponent shall act immediately when such notice of non-compliance is received and correct whatever is the cause for the issuing of the notice. Complaints received regarding activities on the Project Site pertaining to the environment shall be recorded in a dedicated register and the response noted with the date and action taken.

The Proponent is deemed not to have complied with the EMP if, inter alia:

- There is evidence of contravention of the EMP specifications;
- Environmental damage ensues due to negligence;
- The Proponent fails to comply with corrective or other instructions issued by the IEO or competent authority within a specific time; and/or;
- The Proponent fails to respond adequately to complaints from the public.

A system of penalties shall be implemented to ensure compliance with the EMP. This system must be developed by the IEO, in consultation with the Proponent, the Site Manager and the SHEQ Manager. Where Personnel inflicts irreparable damage upon the environment or fails to comply with any of the environmental specifications of the EMP (within 10 days) this would constitute a breach of Contract for which the person may be liable to pay a penalty.

The system of penalties shall be implemented in the following way:

- Penalties shall be issued per incident and individual at the discretion of the SHEQ Manager;
- Penalties shall be issued in addition to any remedial costs incurred as a result of non-compliance with the environmental specifications;
- The SHEQ Manager shall not collect the penalties from individuals, but shall inform the Site Manager of the contravention, the individual's identity, and the amount of the penalties; and

- Penalties shall be imposed by the Site Manager on Personnel and/or subcontractors' staff for contravention of the environmental specifications. Where there are ranges, the amount shall depend on the severity and extent of the damage done to the environment.

Failure by any employee of the Proponent or their sub-contractors to show adequate consideration to the environmental aspects of the contract shall be considered sufficient cause for the Site Manger to have that employee removed from the site. The IEO may, through the Site Manager, also order the removal of equipment that is causing continual environmental damage.

It is recommended that the Proponent institute penalties for the following violations and any others determined during work as detailed below:

- Hazardous petroleum, chemical or oil spill and/or dumping in non-approved sites and persistent or un-repaired fuel and oil leaks.
- Littering on site.
- Lighting of illegal fires on site.
- Any vehicles being driven more than designated speed limits.
- Damage to sensitive riverine environment.
- Uncontrolled/unmanaged erosion.
- Unauthorised removal and/or damage to fauna, flora or cultural & heritage objects on site.
- Possession or use of intoxicating substances on site.
- Urination and defecation anywhere except at designated facilities.
- Where environmental damage is caused or a pollution incident, and/or failure to comply with any of the environmental specifications contained in the EMP, the Proponent shall be liable.

3.8 EMERGENCY PREPAREDNESS

The Proponent shall compile and maintain environmental emergency procedures to ensure that there will be an appropriate response to unexpected or accidental actions or incidents that will cause environmental impacts, throughout the construction period. An Emergency Preparedness and Response plan has been developed and implemented by the Proponent to provide a co-ordinated and professional response in an emergency to maintain a safe workplace. It represents a critical contingency plan that covers the following aspects of emergency management and response:

- Evacuation Procedure
- Injury or Medical Emergency Procedure
- Building Fire Procedure
- Vehicle Fire Procedure
- Vehicle Accident Procedure
- Hazardous Chemical Procedure Continues

- Snake Bite Procedure Continues
- Bee Attack Procedure
- Diesel Tank Fire/Explosion Procedure
- Flooding Procedure
- Robbery Procedure

The Emergency Preparedness and Response plan shall further include:

- Emergency organisation (manpower) and responsibilities, accountability, and liability.
- A list of key personnel and contact details.
- Details of emergency services available (e.g. the fire department, spill clean-up services, etc.).
- Actions to be taken in the event of different types of emergencies.
- Incident recording, progress reporting and remediation measures required to be implemented.
- Information on hazardous materials, including the potential impact associated with each, and measures to be taken in the event of accidental release.

3.9 ENVIRONMENTAL AWARENESS TRAINING

The Proponent shall ensure that its employees and any third party who carries out obligations are adequately trained about the implementation of the EMP, as well as regarding environmental legal requirements and obligations. Training shall be conducted by the SHEQ Manager/Officer where necessary.

The purpose of this environmental training is to provide a general explanation of sustainable environmental practises, but also to explain the content of the EMP, the relevance thereof and how it will be implemented through monitoring. The environmental specifications as per Chapter 4 of this EMP should clearly be explained to all Personnel, as well as non-compliance to it and related penalties.

Environment and health awareness training programmes should be targeted at three distinct levels of employment, i.e. the executive, middle management and labour. The Proponent shall ensure that adequate environmental training takes place. All employees shall have been given an induction presentation on environmental awareness and the content of the EMP. The presentation needs to be conducted in the language of the employees to ensure it is understood.

The environmental training shall, as a minimum, include the following:

- Environmental legal requirements and obligations.
- Made award of the implications of industrial activities adjacent to the sensitive riverine environment.

- Educate on environmental specifications as set out in Chapter 4.
- Educate on mitigation measures required to be implemented when carrying out their work activities.
- The importance of not littering.
- Details of and encouragement to minimise the production of waste and re-use, reduce and recycle waste where possible.
- The importance of using supplied toilet facilities.
- The need to use water and electricity sparingly.

3.10 INFORMATION BOARD(S)

The Proponent shall be responsible for erecting information boards on site. The number and locations of these boards shall be agreed by the Site Manager, SHEQ Manager and IEO.

Information boards should be placed at conspicuous locations on the project site. The contents of the information board shall be provided by the SHEQ Manager in consultation with the Site Manager and IEO and will essentially be to convey Health and Safety regulations on site. It will also advise the public and personnel of operations and the prohibition on entering certain areas. The name and contact number of the SHEQ Manager must be made available through Reception to ensure that the public has access to ask for information and/or to lodge any complaints.

3.11 METHOD STATEMENTS

Method statements from the Proponent will be required for specific sensitive actions on request of the relevant authorities or IEO. A method statement forms the baseline information on which sensitive area work takes place and is thus considered a "live document" in that modifications can be negotiated between the Proponent, Site Manager and IEO if or as required. The Proponent, Site Manager and EIO (and, where relevant, any subcontractors) must sign the Method Statement, thereby indicating that the works will be carried out according to the approved methodology. Changes in the methodology must be reflected by amendments to the original approved Method Statement. Amendments must be signed by both the IEO and SHEQ Manager, denoting that the change is environmentally acceptable. The Proponent and Site Manager must also sign the amended Method Statement.

All method statements will form part of the EMP documentation and are subject to all terms and conditions contained within the EMP main document (see Appendix B). The Method Statement shall cover applicable details about:

- Operational procedures;
- Materials and equipment to be used;
- How and where materials will be stored;
- The containment of accidental leaks or spills;
- Timing and location of activities; and

- Any other information deemed necessary by the IEO.

A method statement describes the scope of the intended work in a step-by-step description for the IEO or relevant authorities to understand the Proponent's intentions. This will enable them to assist in devising any mitigation measures, which would minimise environmental impact during these tasks. The method statement should also clearly stipulate mitigation methods of the intended works, against which the Proponent's performance will be measured. For each instance wherein it is requested that the Proponent submit a method statement to the satisfaction of the IEO and relevant authority, the format should clearly indicate the following:

- What - a concise, description of the task/work to be undertaken;
- How - a detailed description of the process of work, methods, materials and mitigation strategies;
- Where - a description/sketch map of the locality of work (if applicable); and
- When - the sequencing of actions with due commencement dates and completion date estimates.

The Proponent must submit the method statement for specific aspects of the operations. The Proponent shall, except in the case of emergency activities, allow 14 days for consideration and approval of the Method Statement. The SHEQ Manger or IEO may require changes to a Method Statement if the proposal does not comply with the specifications or if, in the reasonable opinion of the SHEQ Manager or IEO, the proposal may result in damage to the environment in excess of that permitted by the specifications. Approved Method Statements shall be communicated to all relevant personnel.

Method Statements for the following aspects shall be provided by the Proponent:

- Hazardous substances
    - Handling, transport and storage of hazardous substances.
    - Emergency spillage procedures and compounds to be used.
    - Methods of refuelling trucks.
    - Petroleum and oil spills.

- Water management for wash bay
    - Details of how waste water is to be handled on Site.
    - Plans and Technical specifications.

- Storm water management
    - Details of how storm water run-off is to be handled on Site.
    - Plans and Technical specifications.

- Sewerage management
    - Details of how sewerage is to be handled on Site.
    - Plans and Technical specifications.

- Leak detection monitoring.
- Emergency response procedures for leak detection.

- Hazardous waste management
  - Methods for the disposal of hazardous waste.
  - Emergency spillage procedures and compounds to be used.

- Solid waste management
  - Solid waste control and removal of waste from Site.
- Dust
  - Dust control protocol.
- Emissions
  - Emissions monitoring and mitigations.
- Fire
  - Emergency procedures for accidental fire or explosion.
- Traffic Safety
  - General procedures

- Demolition of structures
  - Proposed method of demolition, including handling and disposal of materials.

- Natural Resource Management
  - Methods for dealing with *Prosopis* infestation.
  - Methods for rehabilitation of indigenous riverine vegetation.
  - Identified nursery to house indigenous vegetation locally for replanting purposes.
  - Details of methods dealing with the identification, capture and relocation of fauna species of conservation value.

- Rehabilitation
  - Rehabilitation of polluted or disturbed areas.

- Storage and Stockpiling
  - Details on how goods are to be stored and stockpiled on site when necessary.

See Appendix B for more information on the Method Statement and Pro-forma Method Statement.

3.12 RECORD KEEPING

All records related to the implementation of this management plan (e.g. site instruction book, SHEQ Officer's daily diary, induction records, method statements) must be kept together in the on-site office where it is safe and can be retrieved easily. All relevant records should be kept for a minimum of two years and should at any time be available for scrutiny by any relevant authority or stakeholder.

It is recommended that photographs (fixed point photographs for better comparisons before/during/after) are taken of the site prior to, during and immediately after rehabilitation as a visual reference. These photographs should be stored with related documents and other records related to this EMP.

A list of other reports to be kept on site is:

- Final site layout, design documents and technical diagrams.
- All communications detailing changes of design/scope that may have environmental implications.
- Occupational Health and Safety reports.
- Complaints register.
- Incident and accident reports.
- Emergency preparedness and response plans.
- Crisis communication manual.
- Site meeting minutes.
- All relevant permits.
- All method statements.

4 ENVIRONMENTAL SPECIFICATIONS

4.1 SCOPE

These specifications cover the requirements for controlling the impact of operational activities on the natural and social environment.

4.2 CONSTRUCTION ACTIVITIES

Construction on the Project Site has taken place over the years as development advanced. No further construction is envisaged in the near future, only upgrading of facilities and infrastructure according to required standards by local authority regulations and national legislation as stipulated in the Environmental Scoping Report, August 2021.

4.3 OPERATIONAL ACTIVITIES

4.3.1 HAZARDOUS SUBSTANCES

Economic activities of the Proponent require that hazardous substances be transported, stored and used on site. Special management is required to address the use of hazardous substances on the Project Site, because of its location next to the Klein Windhoek River on permeable alluvial soil. Hazardous substances may, thus, not infiltrate soil, ground- or surface water under any circumstances. The following mitigation measures are applicable and must be strictly adhered to:

- All hazardous substances should be stored in specially designed and constructed areas/containers/tanks as per applicable legislation (bunded areas to 120% of the capacity of the tank/container). (Hazardous Substances Ordinance No. 14 of 1974, as amended)
- Fuel storage tanks, piping, fittings and connections must meet recognised industry standards and act (Petroleum Product and Energy Act, No. 13 of 1990, as amended) and older equipment and installations must be upgraded accordingly. These should preferably be under a roof.
- The tanks shall be at least 3.5m from buildings, boundaries and any other combustible or flammable materials
- The rated capacity of tanks shall provide sufficient capacity to permit expansion of the product contained therein by the rise in temperature during storage.
- Leak detection systems should be able to detect the presence of liquid or petroleum leaks or vapour.
- Use corrosion protection in steel tanks and piping.
- Fill pipes on storage tanks should be located within the tank's bunded area.

- Fill pipes should have suitable fittings to ensure a secure, leak-proof connection with the hoses from fuel delivery trucks.
- Tanks should be equipped with devices that prevent spills and overfills, such as overfill alarms, automatic shut-off devices and catch basins around fill pipes.
- In the event of a spill, the focus should be on containing the spill to prevent contamination of soil, surface or ground water.
- There should always be a supply of absorbent material (e.g. chemcap, spill-sorb, drizzat pads, enretech and peat moss) readily available to neutralise and where possible be designed to encapsulate minor spillage. The quantity of such materials shall be able to handle a minimum of 200 litres of liquid spill.
- When trucks, machinery or equipment are serviced, drip trays shall be used to collect the waste oil and other lubricants to avoid incidental spillage.
- Drip trays shall be inspected and emptied daily.
- Drip trays shall be closely monitored during rain events to ensure that they do not overflow.
- Where practical, the Proponent shall ensure that equipment is covered so that rainwater is excluded from the drip trays.
- All static plants (stationary >6 months) shall be located within a bunded area.
- Soil contaminated by oil, fuel or chemicals shall be removed and disposed of at a registered Hazardous Waste Disposal Site.
- Proper training of personnel in responsible handling of hazardous substances and action in the event of spillage is necessary.
- Implement an Emergency Preparedness and Response Plan for unforeseen situations during the daily operations.
- Proper training of personnel in Emergency Preparedness and Response Plan.

4.3.2 WASTEWATER MANAGEMENT

The Proponent shall prevent the discharge of water contaminated with any pollutants, such as soaps, detergent, cements, concrete, lime, chemicals, glues, solvents, paints and fuels, into the environment. To prevent this, the following mitigations measures are applicable:

- Surface water that may accumulate on-site should be channelled and captured through a proper storm water management system to be treated in an appropriate manner before disposal into the environment.
- Water from kitchens, showers, sinks, etc. shall be discharged into a septic tank for removal from Site.
- Wash bay should be totally enclosed with trap and proper treatment of waste water should any chemicals be used. No washing of vehicles, trucks or equipment on site other than in the wash bay.

- The use of detergents for washing shall be restricted to low phosphate and nitrate containing and biodegradable-type detergents.
- Runoff from industrial areas such as from the workshop, fuel depots, truck washing areas and warehouse shall be directed into an appropriate conservancy tank and disposed of at the City of Windhoek's hazardous waste site.
- Septic tank facilities must be inspected and verified to meet required standards and upgraded accordingly to meet standards provided by Water Affairs (2008).
- No sewer, septic tank, pit latrine, VIP or French drain is allowed within 500 m of any private or production borehole. This applies to natural water courses as well.
- Septic tanks must be inspected when empty for cracks and leaks on a regular basis.
- An appropriate waste water treatment facility capable of treating all types of effluent is an option to consider. Continued monitoring of such a system would be essential.
- Avoid the use of herbicides in the area due to the natural flow towards the Klein Windhoek River.
- Water intended for disposal into the environment should meet the required standards as per the Water Resources Management Act No. 24 of 2004.
- Personnel shall notify the SHEQ Officer, Site Manager and IEO immediately of any pollution incidents on Site.
- The existing borehole can be used as monitoring borehole for leakages on-site.

4.3.3 SOLID WASTE MANAGEMENT

No burying or dumping of any waste materials, rubble or refuse shall occur on Site, in the nearby environment or on the Klein Windhoek River banks. The Proponent shall set up a solid waste management and removal system at the Project Site and waste shall be disposed of at the City of Windhoek's solid waste site or hazardous waste site on a regular basis. Waste receipts in this regard should be kept on site.

- Waste bins that are kept outside should have scavenger proof lids.
- Waste bins should be emptied on a regular basis into the on-site waste containers.
- Ensure that no waste is accumulating on site and implement a re-use, reduce and recycle waste management system.
- Where possible and practical, such as at offices and warehouse, waste shall be sorted for recycling purposes.
- Containers for glass, paper, metals, and plastics (a four-bin recycling system) should be provided.
- General waste must be disposed of at City of Windhoek landfill site.

- Hazardous solid waste, such grease and oil rags, etc. should be kept in separate waste containers and must be dumped in the City of Windhoek's Site for Hazardous Waste.
- Receipts for hazardous waste disposal shall be copied to the IEO.

4.3.4 HEALTH, SAFETY AND SECURITY

On-site safety of Personnel is the responsibility of the Employer. The following mitigation measures should therefore be in place:

- The operational management must comply with all applicable occupational health and safety requirements.
- The workforce should be provided with all necessary Personal Protective Equipment (PPE).
- Ensure that all on-site personnel are trained depending on the nature of their work and are aware of the accompanying Health and Safety measures, be it office personnel, truck drivers, workshop mechanics, filling station attendants, etc.
- Ensure that all personnel are trained to follow the Imperial Emergency Response Plan.
- A wellness program should be initiated to raise awareness on health issues, especially precautions of sexually transmitted diseases and Covid-19 under truck drivers.
- Bulk petroleum deliveries from outside should be conducted by properly trained personnel according to pre-established formal procedures to prevent accidental releases and fire / explosion hazards.
- Provide for a first aid kit and properly trained person to apply first aid when necessary.
- Fire extinguishers to be accessible in strategic places.
- Eating may only take place in designated areas.
- Restrict unauthorised access to the site and implement access control measures.
- Staff and visitors to the site must be fully aware of all health and safety measures and emergency procedures.
- Applicable notice boards and warning signs must be visible in appropriate areas.
- Clearly demarcate dangerous areas and no-go areas on site.
- Proper grounding is necessary to avoid static electricity build-up and lightning hazards.
- Use safe electrical installations and tools.

4.3.4.1 Ablution Facilities

The Employer is responsible to provide suitable sanitary arrangements to Personnel. The following requirements should be met:

- Toilets available for the workers shall occur at a maximum ratio of at least 1 toilet per 15 workers and be within walking distance.

- These facilities shall be maintained in a hygienic state and serviced regularly.
- Toilet paper shall be provided.
- The Proponent shall ensure that plumbing of toilets are maintained and hygienic.
- Discharge of waste from toilets into the environment is prohibited. Sewerage must go into a septic tank that is drained on a regular basis.

4.3.4.2 Eating Area

Proper eating areas should be made available for Personnel within the boundaries of the Project Site as agreed with by the IEO.

- The Proponent shall provide adequate refuse bins at the eating area to the satisfaction of the IEO and shall ensure that all eating areas are cleaned daily.
- Waste bins at the eating areas should have scavenger proof lids.
- Cooking of food is not permitted in the eating area.
- No fires may be lit except if approved by the Site Manager, and in properly prepared facilities approved by the IEO.

4.3.5 FIRE CONTROL

Several sources of combustion exist at a truck port, e.g. combustible materials and flammable liquids. The Proponent shall take all reasonable steps to prevent the accidental occurrence or spread of fire. The Site Manager shall appoint a fire officer who shall be responsible for ensuring immediate and appropriate action in the event of a fire. The appointed fire officer shall notify the Site Manager and SHEQ Officer in the event of a fire and shall not delay doing so until such time as the fire is beyond his/her control. The following mitigation measures exist for fire control:

- Safe exit routes need to be identified and procedures fully communicated.
- All personnel need to be fully aware of what to do to both avoid the risk of fire and what to do in the event of a fire.
- In terms of the Atmospheric Pollution Prevention Act (No. 45 of 1965), burning is not permitted as a disposal method.
- No fires may be lit except if approved by the Site Manager, and in properly prepared facilities approved by the IEO. Fires shall be kept small and appropriate to their function.
- The Proponent shall ensure that the fire risk on and near the site is reduced to a minimum.
- Smoking is only permitted in designated smoking areas. Appropriate signage shall be erected in these areas. A container filled with sand and a dedicated fire extinguisher must be available at the smoking area.

- The SHEQ Officer shall ensure that there is always basic fire-fighting equipment on site. This equipment shall include fire buckets, fire extinguishers and fire beaters.

4.3.6 DUST AND EMISSIONS

Dust and emissions are associated with the transporting business on the site in a peri-urban area. The following mitigation measures should therefore be implemented:

- WP Transport's vehicle replacement programme should be implemented to ensure trucks are not more than 10 years old.
- Strict truck service and maintenance programmes should be adhered to.
- Vehicle management systems that measure mileage, fuel consumption and tyre and vehicle maintenance should be implemented and maintained.
- Training on how to conserve fuel should be undertaken for all drivers.
- Route optimisation software should be maintained to achieve optimal travelling distances and saving fuel.
- Speed limits for vehicles on gravel roads around the Project Site. The speed limit for light vehicles is 30 km/h and for heavy vehicles 20 km/h.
- Appropriate dust suppression measures should be used when dust generation is unavoidable particularly during prolonged dry periods in summer.
- Dust suppression by means of wetting should only be done with treated wastewater.
- Removal of vegetation should be restricted to the minimum and only what is necessary.
- Handling and transport of erodible materials shall be avoided under high wind conditions or loaded accordingly.
- Reporting mechanism and action plan in case of excessive wind and dust conditions.
- Where possible, stockpiles should be in sheltered and bunded areas and covered.
- Site personnel are to be provided with access to dust masks.

4.3.7 TRAFFIC SAFETY

- Drivers should have valid driver's licenses with ample experience on proper road usage and manners on-site as well as when making use of public and international roads.
- Drivers must adhere to speed limits.
- Trucks need to be in a road worthy condition and maintained in a perfect working condition.
- Appropriate signs should be in place along the access road notifying road users of truck movements.

- Measures must be undertaken to ensure that material loads are properly covered and safe for transportation.

4.3.8 NATURAL RESOURCES

Industrial developments are expected to place an additional load on existing natural resources. The change in land use from 'residential' to 'industrial' that already took place on the Project Site would have caused an increase in electricity and water usage. The following mitigation measures can be implemented to reduce water and electricity consumption:

- An appropriate waste water treatment facility capable of treating all types of effluent should be considered.
- Re-use of treated waste water should be considered wherever possible to reduce the consumption of potable water.
- Solar electricity should be considered wherever possible.
- Replace existing lightning with LED.
- Where possible limit lights during the night to security lightning only.
- Do not leave lights or appliances on unnecessary.
- Any water and electricity saving initiatives should be collaborative and involve all employees. Business costs should be communicated to all personnel and should regularly be raised at meetings to keep it top of mind.

4.3.9 NOISE AND VIBRATIONS

- Appropriate directional and intensity settings are to be maintained on all hooters and sirens, if intended to be used.
- No amplified music should be allowed on Site.
- No hooting.
- All trucks and fork lifters, and any other equipment should be kept in a perfect working condition and fitted with noise reduction devices.
- Monitoring of noise levels should be conducted to make sure the noise levels does not exceed acceptable limits.
- All areas where noise levels are above 85 dB(A) should be managed and controlled in accordance with the Labour Act.
- Activities operated after 18h00 should not result in any noise impact.
- No activity having a potential noise impact should be allowed after 18h00 if possible.

4.3.10 PROTECTION OF INDIGENOUS FAUNA AND FLORA

Imperial Logistics undertook to demonstrate integrating sustainable environmental practices into their everyday operations. This implies environmental sensitivity and commitment from the side of the new management of WP Transport (Pty) Ltd.

The riparian ecosystem on and next to the Project Site is currently invaded by *Prosopis* species that spread along the Klein Windhoek River over a couple of years. It is advised that the Proponent remove all *Prosopis* trees on the Project Site and next to it in the riverbed and replace those with indigenous species as a token of environmental management best practice. It can be commissioned with the following management:

- Removal of *Prosopis* trees on the properties and along the riverbed should be encouraged. This can be undertaken with assistance from the community.

- Chopping of *Prosopis* trees for wood and/or firewood is allowed with permission from the Proponent.

- Collection of *Prosopis* pods or seeds is allowed with permission from the Proponent.

- Manual removal of *Prosopis* trees should be undertaken, since no herbicides, pesticides or other poisonous substances may be used and/or stored next to the river.

- The removal of the *Prosopis* species will influence habitat of bird and other fauna species, but the replacement of these with indigenous tree species will enhance the general condition of the riparian ecosystem.

- The replacement of the *Prosopis* trees with indigenous tree species must be undertaken in consultation with the National Botanical Research Institute of Namibia (NBRI) and Namib Trees Indigenous Nursery in Windhoek.

- No introduction of ornamental plants, especially potential invasive alien species, as part of the rehabilitation or landscaping, but only use localised indigenous species;

- Limit the use of lights other than security lights during the night as this could influence and/or affect various nocturnal species – e.g. bats and owls, etc.;

- No removing of birds' nests or eggs allowed;

- No killing of species viewed as dangerous – e.g. various snakes – when on site;

- No setting of snares or any form of illegal hunting activities;

- Remove and relocate slow moving vertebrate fauna (e.g. tortoises, chameleon, snakes, etc.) to suitable habitat elsewhere in area.

4.3.11 EROSION CONTROL

- Any erosion channels developed during rainy seasons shall be backfilled and compacted, and the areas restored;

- Anti-erosion compounds shall consist of an organic or inorganic material to bind soil particles together and shall be a proven product able to suppress dust and erosion.

4.3.12 GROUNDWATER

- Approval and a permit is required to abstract any groundwater from existing or new boreholes on-site.
- A 100 m buffer zone must be maintained at all times around production boreholes; No development or construction activities may occur within this buffer zone.

4.3.13 COMMUNITY RELATIONS

- The SHEQ Manager shall keep a "Complaints Register" on Site. The Register shall contain all contact details of the person who made the complaint, and information regarding the complaint itself.

4.3.14 LIGHTS

The Proponent shall ensure that any lighting installed on the site for his activities does not interfere with road traffic or cause a reasonably avoidable disturbance to the surrounding community or other users of the area.

4.3.15 TEMPORARY SITE CLOSURE

If the Project Site is closed for a period exceeding one week, the following checklist procedure shall be carried out by the SHEQ Officer in consultation with the Site Manager and IEO.

(i) Fuels/flammables/hazardous materials stores

- Ensure fuel stores as low in volume as possible.

- No leaks.

- Outlet secure/locked.
- Bund empty (where applicable).
- Fire extinguishers serviced and accessible.
- Secure area from accidental damage, e.g. plant collision.
- Emergency and contact numbers to be available and displayed.
- Adequate ventilation.

(ii) Safety

- All trenches and manholes secured.
- Fencing and barriers in place as per the relevant Occupational Health and Safety Act.
- Notice boards applicable and secured.
- Emergency and management contact details displayed.
- Security persons briefed and have facility for contact.
- Fire hazards identified.
- Inspection schedule and log by security staff.

(iii) Erosion and Siltation

- Wind and dust mitigation in place.
- Stockpiles at stable angle.
- Erosion protection measures in place.

(iv) Water Contamination and Pollution

- Fuels hazardous stores secured.

- Hazardous material stores secured.
- Toilets empty and secured.
- Refuse bins empty and secured with lids.
- Bunding clean and treated.
- Drip trays empty and secure (where possible).
- Structures vulnerable to high winds secure.

4.4 MITIGATION MEASURES AND PROPOSED MANAGEMENT PROGRAMME

The table below outlines those specific mitigation measures required to fulfil the recommendations. These measures must be implemented during the operational phase. The responsibility for these measures is included in Column IV.

Issue	Objective	Mitigation Measure	Responsibility	Compliance Notes
OPERATIONS				
SHEQ Manager	Ensure that the SHEQ Manager is aware of his/her responsibility.	Provide the SHEQ Officer with the EMP.	Proponent Site Manager	
SHEQ Officer	Ensure that the SHEQ Officer is aware of his/her responsibility.	Provide the SHEQ Officer with the EMP.	Proponent Site Manager	
Independent Environmental Officer (IEO)	Ensure that activities on site are compliant with the requirements of the EMP.	Appoint an Independent Environmental Officer to oversee environmental aspects.	Proponent Site Manager SHEQ Manger	
Communication	Ensure that interested and affected parties are provided with a medium through which to lay complaints regarding activities on site.	A complaints register should be kept on-site in the office. The IEO needs to be informed of all complaints and corrective action must be taken where required.	SHEQ Manager IEO	
Effect of the EMP	Ensure that the EMP is enforced.	All Personnel must be notified and bound by the content of this EMP.	Proponent Site Manager SHEQ Manager&Officer IEO	
Training	Awareness of all site personnel regarding environmental matters.	Develop and implement a training programme to address environmental issues and responsibilities.	SHEQ Manager&Officer IEO	
Operational activities	Be aware of the highly sensitive situation with the Klein Windhoek River situated directly next to the Project Site.	Operational activities on the Project Site should at all times accommodate the sensitive nature of the soil, ground- and surface water and may not cause any pollution thereof.	Proponent Site Manager SHEQ Manager&Officer IEO	

Issue	Objective	Mitigation Measure	Responsibility	Compliance Notes
	Ensure that the economic activities do not pollute the environment.	Fuel storage tanks, piping, fittings and connections must meet recognised industry standards and act and older equipment and installations must be upgraded accordingly.		
		Proper Waste Management, Waste Water Management, Hazardous Waste Management and Sewerage System must be in place.	Site Manager SHEQ Manager&Officer IEO	
Waste Management	Ensure the effective and efficient separation, storage and removal of waste from the Project Site.	Develop a Waste Management Plan for the project site which will detail: - Schedules for collection; - Responsible parties for collection; - Details regarding waste separation (hazardous vs. general); - Provision of facilities for the separation and storage of waste; - Details regarding the disposal of the waste (hazardous and general); - Assigns responsibilities for these activities.	Site Manager SHEQ Manager&Officer IEO	
		All wastes (general or hazardous) must be collected and disposed of at the appropriate City of Windhoek landfill sites.	SHEQ Manager&Officer	

Issue	Objective	Mitigation Measure	Responsibility	Compliance Notes
Storage Facilities	Ensure that hazardous materials are stored according to legislative requirements.	Specifically, designed storage facilities need to be provided and used for hazardous materials.	SHEQ Manager&Officer	
Truck repairs	Ensure that spillages are minimised and that where these occur, that they are appropriately managed.	Truck repairs must be done in the workshop on an appropriate work surface provided.	SHEQ Officer	
		Drip trays must be used during repairs.		
		There should always be a supply of absorbent material readily available to neutralise and encapsulate minor spillage.		
Cleaning of equipment	Ensure that spillages are minimised and that where these occur, that they are appropriately managed.	Proper cleaning trays should be used for the cleaning of equipment.	SHEQ Officer	
Installation of Services	Ensure that all points for water provision are regularly inspected for erosion impacts.	Implement adequate mitigating measures to curtail any erosion impacts.	SHEQ Officer	
Storm Water Run-off	Ensure that run-off does not contribute to soil, surface- or groundwater contamination.	A proper stormwater management system must be constructed (if necessary), implemented and maintained.	SHEQ Manger&Officer IEO	
Ground Water	Prevent the contamination of groundwater resources.	Vehicles must be equipped with drip trays to prevent spillages of oils and fuels.	SHEQ Officer	
		The existing borehole on site can be used as monitoring borehole to detect any leakage and pollution.	SHEQ Officer IEO	

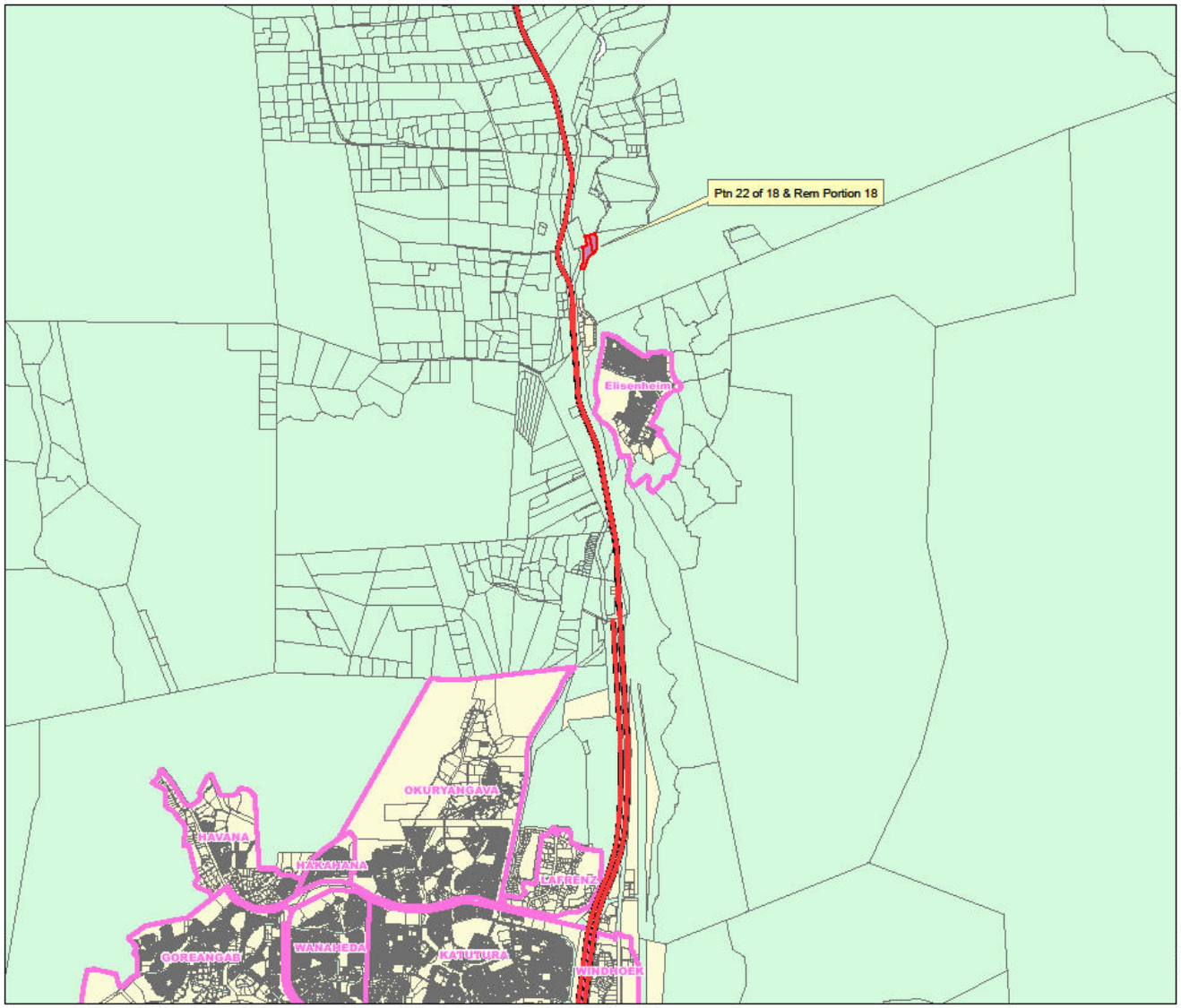
Issue	Objective	Mitigation Measure	Responsibility	Compliance Notes
Soil	Ensure preservation of the topsoil to be re-used for rehabilitation.	Topsoil stockpiles must be established in disturbed zones.	SHEQ Officer	
Contaminated Soil	Ensure that soils that are contaminated do not pollute the environment.	All soils that have been contaminated by fuel spills, paints spills, etc. must be appropriately removed from the site.	SHEQ Officer	
Dust	Ensure dust does not cause nuisance to neighbouring activities.	Wet all exposed sand areas such as roadways, stockpiles and working areas that give rise to dust. This must ensure adequate dust suppression.	SHEQ Officer	
Emissions	Ensure that the Carbon Footprint stays small.	Implement fleet management accordingly	SHEQ Manager Site Manager	
Health, Safety and Security	Ensure the safety and security of staff and the public.	All local authority by-laws must be adhered to.	SHEQ Manager&Officer	
		Occupational Health and Safety Act must be abide by.	SHEQ Manager&Officer	
		Ensure that all personnel are trained depending on the nature of their work.		
		All Personnel must be aware of the Imperial Emergency Response Plan and act according to the Emergency response programmes in case of emergencies.	SHEQ Manager&Officer	
		Restrict unauthorised access to the site and implement access control measures	SHEQ Officer	

Issue	Objective	Mitigation Measure	Responsibility	Compliance Notes
Traffic Safety	Ensure responsible driving and road safety.	Drivers should have valid driver's licenses with ample experience on proper road usage and manners on-site as well as when making use of public roads.	Site Manager SHEQ Officer	
		Trucks need to be in a road worthy condition and maintained in a perfect working condition.	Site Manager SHEQ Officer	
Noise	Ensure that nuisance noise from operational activities and vehicles does not disrupt the surrounding landowners.	No loud sirens, alarms or sound systems permitted.	SHEQ Officer	
MONITORING				
Audit Reports	Ensure adequate reporting of progress with the implementation of the EMP	Regular reports, monthly and yearly are proposed, and should be kept on-site to submit to the DEA on request.	SHEQ Manager & Officer IEO	
Monitoring	Ensure compliance with the requirements of the EMP.	Undertake monitoring activities monthly.	SHEQ Manager & Officer IEO	

APPENDIXES

APPENDIX A

LOCALITY MAP



BRAKWATER

Portion 22 of 18 &
Rem Portion of 18

N

Legend

- Trunk Roads
- Location of Portions
- Township Extentions
- Windhoek Erven
- Windhoek Farms

LOCALITY MAP

NOTES:

PREPARED BY:

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SURVEY:	DATE:	April 2021
DESIGN: Urban Green		
DRAWN: GBS	DATE:	April 2021
DRAWING NO: Portion 18 & 22		
SCALE	1:52,766	

APPENDIX B

PRO-FORMA METHOD STATEMENT

METHOD STATEMENT

CONTRACT: ..... **DATE**: .....

WHAT WORK IS TO BE UNDERTAKEN? (give a brief description of the works)

WHERE ARE THE WORKS TO BE UNDERTAKEN? (where possible, provide an annotated plan and a full description of the extent of works)

START AND END DATE OF WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED

Start Date:	End Date:

HOW ARE THE WORKS TO BE UNDERTAKEN? (provide as much detail as possible, including annotated sketches and plans where possible) *Note: please attach extra pages if more space is required.
