



UPDATED ENVIRONMENTAL MANAGEMENT PLAN (EMP)

on the Labour Act, 6 of 1992 as amended by the Labour Act, 11 of 2007 and Section 58 of the Environmental Management Act, 7 of 2007

Project No: 2025/269/K

CONFIDENTIAL

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UPDATED EMP

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STATEMENT PAGE

National Environmental Health Consultants CC (NEHC CC) is an Approved Inspection Authority in both South Africa and Namibia, and duly registered as such in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) in South Africa under Certificate Number: OH005-Cl016, and in Namibia under the Labour Act, 1992 (Act 6 of 1992), as amended by the Labour Act, 2007 (Act 11 of 2007). NEHC CC is also registered with the Allied Health Professions Council of Namibia (HPCNA) as an Environmental Health Practitioner under Registration Number: EPH00901, under the Allied Health Professions Act, 2004 (Act 7 of 2004).

J. Pienaar conducted this updated Environmental Management Plan on behalf of **NEHC CC** and hereby declares that the results/findings given in the report are a true reflection of the conditions encountered during the survey/observations on site.

Where relevant published and validated methods exist, they are always used in preference to novel methods. If a novel method is applied, a summary of validation and reference to the internal Standard Operating Procedure(s) is provided.

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17th of November 2025 EMP REPORT DATE

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K

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Ministry of Labour, Industrial Relations and **Employment Creation** NAMIBIA

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K

EXECUTIVE SUMMARY

National Environmental Health Consultants CC (NEHC CC) was commissioned by Desert Storage CC – Farm 38, Walvis Bay to undertake and perform an updated Environmental Management Plan (EMP) for their existing bulk emulsion facility for the storage, handling, and transportation of hazardous chemical substances on a portion of Farm 38, Walvis Bay.

The updated EMP is being undertaken in accordance with the requirements of Namibia's Environmental Assessment Policy and the Environmental Management Act, 7 of 2007, and other relevant legislation and regulations pertaining to Environmental Assessments and the protection of the environment in the Republic of Namibia. A host of international policies and standards are also being taken into account.

In order for the Namibian Ministry of Environment, Forestry, and Tourism (MEFT) to make an informed decision as to whether or not the project should receive an Environmental Clearance Certificate (ECC) and be allowed to proceed, it is essential that potentially significant environmental and social impacts (both negative and positive) are investigated and well understood. It is, therefore, necessary to conduct the updated Environmental Management Plan (EMP) process. This led to NEHC CC being appointed by **Desert Storage CC – Farm 38**, **Walvis Bay** to undertake the updated EMP for their existing bulk emulsion facility for the storage, handling, and transportation of hazardous chemical substances on a portion of **Farm 38**, **Walvis Bay**.

The purpose of the updated EMP Report is to:

- Provide a description of the existing facilities, including a sufficient level of detail to inform the Ministry of Environment, Forestry, and Tourism, and
- > Describe the local environment within which the existing facility is situated, to assist further, in identifying issues and concerns.

Glossary and Abbreviations

ACRONYM	DESCRIPTION
CC	Close Corporation
CEs	Consulting Engineers
CO	Contraction Phase
CLO:	Community Liaison Officer
DS	Design & Planning Phase
DE	Decommissioning Phase
ECO	Environmental Control Officer
EMP	Environmental Management Plan
EMPr	Environmental Management Programme
MEFT	Ministry of Environment, Forestry, and Tourism
OP	Operational Phase
PM	Project Manager (Developer Representative)
RA	Resident Architect
ELO	The Environmental Liaison Officer
VOC's	Vapours

Contents

<u>1</u>	INTRODUCTION	Error! Bookmark not defined.
1.1	Locality	Error! Bookmark not defined.
1.2	Project Background Information	1-3
1.3	Objectives of the EMP	3
1.4	Key Characteristics of the report	3
1.5	COMPLIANCE TO REGULATIONS	3-4
1.6	Responsible Parties	4-7
1.6.	.1 Phases of the Project	4
1.6.	.2 Roles and Responsibilities	4
1.6.	.3 Standards	6
1.6.	.4 EMP Objectives	6
	,	
1.6.	.5 EMP Context	6-7
2	PHASES OF THE PROJECT	7
_		
2.1	The Planning Phase	7
2.2	Pre-construction Phase	
2.3	The Construction Phase	7-8
2.4	The Operational Phase	8
<u>3</u>	ANTICIPATED ENVIRONMENTAL IMPACTS	8
<u>4</u>	RESPONSIBILITIES	8-9
<u>5</u>	IDENTIFICATION OF ENVIRONMENTAL ASPECT	S AND IMPACTS9-17
<u>6</u>	ADDENDUMS	18
_		
ANI	NEXURE A: ENVIRONMENTAL INCIDENT LOG	18
	NEXURE B: COMPLAINTS RECORD SHEET	
• •		
7	ATTACHMENT A: CERTIFICATES	20-24
_		

NATIONAL ENVIRONMENTAL HEALTH CONSULTANTS CC

Tables

Table 1:	Shows an overview of the project	2
	OPERATIONAL PHASE – Socio- economic: Job opportunities & economic upliftmenT	
rabio 2.	OPERATIONAL PHASE – Socio- economic: Contribute to upgrading of exisiting infrostructure	
	OPERATIONAL PHASE – Bio-Physical: Exotic Plant Species	
	OPERATIONAL PHASE – Legal Compliance: Visual Intrusion & Light Pollution	11
	OPERATIONAL PHASE – Legal Complaince: Traffic	12
	OPERATIONAL PHASE – Legal Complaince: Noise	13
	OPERATIONAL PHASE – Legal Compliance: Atmospheric Pollution & Odours	13
	OPERATIONAL PHASE – Legal Compliance: Safety & Security	13
	OPERATIONAL PHASE – Bio-Physical: Soil and Groundwater Contamination	15
	OPERATIONAL PHASE – Bio-Physical: Risks of Fires & Explosions	15
	OPERATIONAL PHASE – Bio-Physical: Waste Generation & Disposal	16
	OPERATIONAL PHASE – Bio-Physical: Transportation of Product	17

Figures

Figure 1 Location of the existing, DESERT STORAGE CC – Farm 38, Walvis Bay

1



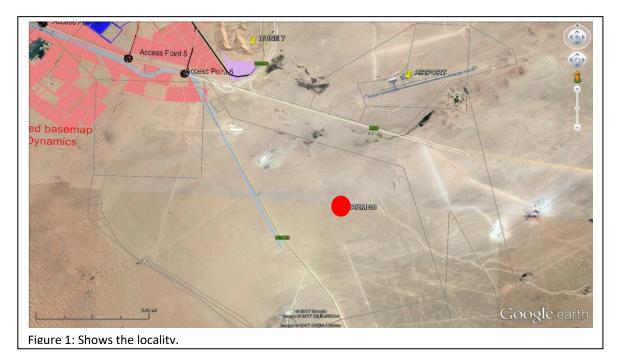
1. INTRODUCTION

The project proponent, **Desert Storage CC – Farm 38, Walvis Bay** has appointed National Environmental Health Consultants CC (NEHC CC), as its independent environmental consultant, for the purpose of conducting this updated Environmental Management Plan (EMP) process.

The purpose of an updated EMP is to guide the operational phase of the existing bulk emulsion facility owned and operated by **Desert Storage CC – Farm 38**, **Walvis Bay** for the storage, handling, and transportation of hazardous chemical substances on a portion of **Farm 38**, **Walvis Bay**. This process is conducted in order to eliminate or mitigate the various possible risks to the environment, and its surrounding inhabitants during this phase, and through doing so, it will subsequently ensure that minimal damage will be effected or occur to these areas during the operational phase of the existing bulk emulsion facility for the storage, handling, and transportation of hazardous chemical substances, owned and operated by **Desert Storage CC – Farm 38**, **Walvis Bay**, which is based on the mitigation measures which had been identified for inclusion in this updated EMP.

The ultimate goal of the EMP is to meet social, economic, and bio-physical objectives to such an extent, that the overall product of the activity will not result in a nett negative impact. The economic benefit of the existing bulk emulsion facility on **Farm 38, Walvis Bay**, should outweigh the negative environmental impacts addressed during this assessment.

1.1. Locality



1.2. Project Background Information

National Environmental Health Consultants CC (NEHC CC) has been appointed by Desert Storage CC to conduct the Environmental Impact Assessment (EIA) and Environmental Management Process (EMP) in terms of the:

Environmental Impact Assessments are regulated by the Ministry of Environment and Tourism (MET), in terms of the Environmental Management Act, 7 of 2007, which was promulgated and published in the Government Gazette No. 3966, on 27 December 2007,

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



The List of Activities that may not be undertaken without an Environmental Clearance Certificate and the Environmental Impact Assessment Regulations in terms of the Environmental Management Act, 7 of 2007, which were promulgated and published in Government Gazette No. 4878, on 6 February 2012.

Desert Storage CC – Farm 38, Walvis Bay applied in 2021 for the establishment of a bulk emulsion facility on a 5-hectare portion of **Farm 38, Walvis Bay** in the Erongo Region. The activities of **Desert Storage CC – Farm 38, Walvis Bay** includes the storage, handling, and transportation of hazardous chemical substances, with their primary focus being Ammonium Nitrate. Approval from the relevant authorities were obtained and an Environmental Clearance Certificate was issued to **Desert Storage CC – Farm 38, Walvis Bay** in 2022.

As mentioned, and detailed in the Environmental Impact Assessment Report the aim of the bulk storage facility is to store, handle, and transport hazardous chemical substances, primarily Ammonium Nitrate. Through the bulk storage facility, **Desert Storage CC – Farm 38, Walvis Bay** intends to serve the local mining industry and exporting to the neighboring SADEC countries. The Ammonium Nitrate bulk bags will be brought in and imported mainly by bulk vessel through NamPort and then be transported by road to the proposed site and stored at the site. From the proposed site the Ammonium Nitrate will be exported and transported to the neighboring SADEC countries.

Ammonium Nitrate is an oxidizing agent and in the presence of a hydrocarbon it is a potential explosive hazard. Due to the explosive properties of Ammonium Nitrate, it is classified as a dangerous, hazardous and explosive substance in terms of the Explosives Act, 22 of 1956, thus, a license is required for the operation of the proposed storage facility.

Ammonium Nitrate is commercialized as a raw material for the manufacturing of blasting agents at various mining operations, with different kinds of products that adapt to each client's needs, delivering specific solutions for their applications. There is thus an increasing and growing demand for Ammonium Nitrate for the manufacturing of explosive agents in the mining and quarrying industry, and **Desert Storage CC – Farm 38, Walvis Bay** aims to meet these growing and increasing demands in the mining industry.

The Environmental Scoping and EMP report were done quantitatively, consisting of descriptions of the operation and the processes. This was followed by the identification of the material hazards, reviewing incident experience and noting tests done. Hazardous events were also analyzed, their consequence, severity and cause likelihood, were quantified. A combination of severity and likelihood allowed for the estimation of the risks, which were then compared with acceptability targets, from which the need for further risk treatment was established.

The bulk storage facility is located on Farm 38, within the Walvis Bay Municipal District.

Product hauling from the site will mainly utilize the C14, D1983 linking the C14 with the B2 to transport their product to their clients. Hauling trucks travelling from NamPort to and from the site along the C14 road to an established gravel access road (±8 km South of Walvis Bay) that links the **Desert Storage CC – Farm 38, Walvis Bay** site with the C14, will be utilized during bulk product receiving off-loading periods.

The total lease area for **Desert Storage CC – Farm 38, Walvis Bay** storage facility is approximately 5 hectares (50 000 m²).

This updated Environmental Management Plan (EMP) addresses the management of environmental Impacts related to the existing bulk storage facility owned and operated by **Desert Storage CC – Farm 38, Walvis Bay**. The documents should be used for managing, mitigating, and monitoring the environmental impacts associated with the decommissioning of the facility, as identified and illustrated in the Environmental Scoping Report conducted at and

Date:Company:Occupational Hygienist:Project No:13th of November 2025Desert Storage CC – Farm 38, Walvis BayJohan Cornelissen2025 / 269 / K



for the facility. The Environmental Scoping Report will be valuable as a reference source for understanding this EMP, and for placing it into perspective.

1.3 Objectives of the EMP

The primary objectives of the updated EMP are as follows:

- To describe action plans for achieving the mitigation measures described in the Environmental Scoping Report, and
- > To indicate responsibilities regarding the implementation of these action plans.

Desert Storage CC – Farm 38, Walvis Bay completed the first EMP Report in 2021, dated 17 February 2022, which was approved by the Ministry of Environment, Forestry, and Tourism, and an Environmental Clearance Certificate was issued by the Ministry of Environment, Forestry, and Tourism on 20 September 2022.

1.4 Key Characteristics of the report

Table 1: Shows an overview of the project.

Element	Description
Proponent	Desert Storage CC – Farm 38, Walvis Bay
	Mr. Philipie Baard
Name of the site	Desert Storage CC – Farm 38, Walvis Bay
Property Description	A 5-hectare portion of Farm 38, Walvis Bay
Site Coordinates	1. "S 23°00'39.84472" – "E 14°37'40.28159",
	2. "S 23°00'37.02836" – "E 14°37'48.05116"
	3. "S 23°00'43.39887" – "E 14°37'50.74583",
	4. "S 23°00'46.29494" – "E 14°37'42.97653",
Extent of the site	A 5-hectare portion of Farm 38, Walvis Bay
Current capacity of the two sites	Existing bulk emulsion storage facility
Baseline environment	Limited vegetation on the site,
	There is no surface water bodies located within a
	500m radius of the site, and
	Area is characterized as not having a shallow water
	table.

1.5 COMPLIANCE TO REGULATIONS

Desert Storage CC – Farm 38, Walvis Bay will need to comply with the following legislation:

- > The Constitution of the Republic of Namibia (1990),
- Namibia's Green Plan,
- ➤ Vision 2030: Third National Development Plan of Namibia, 2006/7 20011/12,
- > Environmental Assessment Policy, 1995,
- Draft Wetland Policy of 2003,
- > The National Environmental Health Policy,
- ➤ GOVERNMENT GAZETTE OF THE REPUBLIC OF NAMIBIA, Government NOTICES, dated 06 February 2012 number 4878,
- > Environmental Management Act, 7 of 2007,
- The Water Resources Management Act, 24 of 2004,
- Labour Act, 6 of 1992: Regulations for the Health and Safety of Employees at Work,
- Labour Act, 11 of 2007.
- Nature Conservation Ordinance, 4 of 1975 (as amended 1996),
- Atmospheric Pollution Prevention Ordinance, 11 of 1976,
- Petroleum Products and Energy Amendment Act, 3 of 2000,
- Soil conservation Act, 76 of 1969,

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



- Legislation related to effluent and wastewater disposal Model Drainage Regulations, 1996.
- ► Hazardous Substances Ordinance, 14 of 1974, and amendments,
- Nature Conservation Ordinance Amendment Act, 5 of 1996,
- > Explosives Act, 22 of 1956,
- National Policy on Tourism for Namibia, 2008, and
- National Heritage Act, 27 of 2004.

1.6. Responsible Parties

1.6.1. Phases of the Project

The point of departure for any EMP is to take a pro-active approach by addressing and minimizing any potentially significant problem, before it occurs. In particular this updated EMP deals with the current operational phase of the bulk storage facility.

1.6.2. Roles and Responsibilities

Various role players have a range of responsibilities to perform during the operational phase, and if any upgrades or construction take place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility.

1.6.2.1. Project Manager (PM) (Developer Representative)

If any upgrades or construction takes place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, the PM will be responsible for the following:

- The PM will be responsible for ensuring that the development, upgrades, and construction is implemented and performed according to the requirements as set out in the EMP.
- The PM should ensure that sufficient resources are available to the other role players to efficiently perform their tasks in terms of, and under the updated EMP.
- The PM must appoint an independent Environmental Control Officer (ECO) to ensure strict adherence to the EMP.

1.6.2.2. Resident Architect (RA)

If any upgrades or construction takes place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, the RA will be responsible for the following:

Only architects approved by the PM will be allowed to work on the project and will oversee the individual contracts between the owners of the entire site or portions thereof, and the contractors.

1.6.2.3. Environmental Control Officer (ECO)

If any upgrades or construction takes place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, the ECO will be appointed at the start of the construction, or upgrades, and is mandated to do the following:

- Ensure that all contractors/subcontractors/employees are fully aware of their environmental responsibilities. This will take the form of an initial environmental awareness-training program, in which the requirements of this document will be explained.
- Any damage to the environment must be repaired as soon as possible after consultation between the ECO, the Consulting Engineer, and the relevant contractors.
- The ECO shall monitor their actions to ensure that the developer and/or contractor are adhering to all the stipulations of the EMP.

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



- The ECO shall be responsible for monitoring the construction activities throughout the project by means of site visits and meetings. This should be documented as part of the site meeting minutes.
- The ECO must sign off and the PM must certify that all clean-up and rehabilitation, or any remedial action required, is completed prior to the transfer of properties.
- A post-construction environmental audit is to be conducted to ensure that all conditions in the EMP have been adhered to.

1.6.2.4. Auditing / Inspections

If any upgrades or construction takes place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility:

- The appointed ECO on a regular basis should inspect the site where necessary.
- The PM or the contractor's representative will accompany the ECO on, on-site inspections.
- The contractor will use the formats presented in this updated EMP to report to the PM in terms of compliance to and with this document.
- When, in the opinion of the ECO, a construction activity will result in environmental damage, the ECO will issue instructions to the contractor or PM, who will in turn order the contractor, to halt the activity. Spot fines or penalties may be levied for noncompliance.

1.6.2.5. Method Statements

If any upgrades or construction takes place on or at the existing **Desert Storage CC – Farm 38**, **Walvis Bay** bulk storage facility, construction methods statements from the contractor will be required for specific activities in sensitive environments on request of the Authorities, or the ECO. All method statements will form part of the EMP documentation and are subject to all terms and conditions contained within the EMP document. For each instance wherein it is requested that the contractor submit a method statement to the satisfaction of ECO, the format should clearly indicate the following:

- What a brief description of the work to be undertaken,
- How a detailed description of the process of work, methods, and materials,
- Where a description / sketch map of the locality of work, and
- When the sequencing (phases) of actions with a commencement date and a completion date estimation.

The contractor must submit the method statement before any particular construction activity, or any upgrade is due to start. Work may not commence until the method statement has been approved by the ECO.

1.6.2.6. Record Keeping

All records related to the implementation of this management plan must be kept together in an office where it is safe. Records should be kept for two (2) years and at any time are available for scrutiny by any relevant Authority.

1.6.2.7. Resident Engineer (RE)

If any upgrades or construction take place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, a RE acts as a direct, on-site resource for all technical aspects related to the development. He/she is available on the construction site at all times, overseeing all phases of the construction activities. He/she will liaise with the ECO where required to ensure EMP implementation.

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



1.6.2.8. Consulting Engineers (CEs)

If any upgrades or construction take place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, these engineers are involved during the planning, design, and construction period. They are not available on site at all times but are part of the specialist team during the final design and construction stages, to advise on appropriate environmental management and mitigation.

1.6.3. Standards

If any upgrades or construction take place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility:

- The ECO will keep written and photographic records of the site, and its surroundings before, after, and during construction on the site.
- The contractor will keep records of construction activities, instructions received from the ECO and PM concerning environmental matters.
- > The ECO will keep records of cases of non-compliance and remedial actions taken.
- Where no quantitative standards are applicable, visual standards will apply.
- The contractor will rehabilitate the site to a condition acceptable to the ECO and respond timeously to any complaints and instructions regarding construction activities.

1.6.4. EMP Objectives

This EMP must be used during the current operational phase of the existing **Desert Storage CC – Farm 38**, **Walvis Bay** bulk storage facility. The objectives of this plan are to:

- Ensure all environmental safeguards are carried out correctly.
- Manage site activities effectively and coordinate with other stakeholders in the project.
- Minimize adverse impacts on the environment.
- Ensure that environmental mitigation measures are in place from the start of the project.
- Minimize disruption to fauna and flora and neighbouring landowners / communities.
- Monitor the project.

1.6.5. EMP Context

The EMP originally formed part of the overall planning process and phase of the project, which should be implemented by the Developer, upon approval thereof by the appropriate authorities. However, the updated EMP provides for environmental mitigation measures during the current operational phase of the project and should continuously be implemented throughout the duration of the project. A copy of the EMP must be available on site at all times.

There are at least 2 role players participating in the environmental management of the site, namely:

- Desert Storage CC Farm 38, Walvis Bay, and
- The Service Providers utilized by **Desert Storage CC Farm 38, Walvis Bay.**

This updated EMP must be attached as an Appendix to service provider tender documents and must be referred to in the tender documents as *special conditions of the tender*.

Ultimate responsibility for implementation of the updated EMP lies with **Desert Storage CC** – **Farm 38, Walvis Bay.** This responsibility, in some instances may be delegated to contractors in the employ and service of **Desert Storage CC** – **Farm 38, Walvis Bay** for practical purposes, but **Desert Storage CC** – **Farm 38, Walvis Bay** will retain legal



accountability. In that capacity, **Desert Storage CC – Farm 38, Walvis Bay** should delegate suitably qualified persons with the responsibility to ensure the implementation of the updated EMP, and who will:

- Know the contents and implications of the Environmental Scoping Report and monitor the implementations of the Environmental Scoping Report findings using the EMP.
- Guide, advise, and consult the contractors on environmental issues during the decommissioning of the respective bulk storage facility.
- Revise and update the updated EMP as required and inform relevant parties of the changes.
- Protect the environment.

Service Providers and Contractors will be saddled with the following responsibilities during the decommissioning of the bulk storage facility:

- Ensure that all requirements of the updated EMP are communicated to, understood, and followed by all persons working on the project who may have an impact on the environment.
- Ensure that a procedure exists for reporting incidents and resolving any problems rapidly.
- Keep good records relating to the compliance/non-compliance with the conditions of the authorization.
- These records must be made available to the relevant authority within seven (7) days of a written request.

2. PHASES OF THE PROJECT

The aim of this updated Environmental Management Plan (EMP) is to derive mitigation measures that should be made binding when additional contracting activities result in the appointment of contractors on site, as well as measures that should be implemented during the current operational phase.

The purpose of the updated EMP is to provide solutions to problems before they occur. If adhered to this updated EMP should limit corrective measures required during the current operational phase of the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility.

The updated EMP deals with the following phases as detailed below:

2.1 The Planning Phase

Considering that this updated EMP pertains to the existing **Desert Storage CC – Farm 38**, **Walvis Bay** bulk storage facility, there will be no planning phase.

2.2 The Pre-Construction Phase

As this is an existing bulk storage facility, that is owned and operated by **Desert Storage CC – Farm 38, Walvis Bay**, there will be no Pre-Construction Phase.

2.3 The Construction Phase

This is an existing bulk storage facility, therefore, there will not be a construction phase. However, should any construction or upgrades take place at or on the existing bulk storage facility of **Desert Storage CC – Farm 38, Walvis Bay,** the majority of the impacts of such construction and upgrades, will have a direct and immediate effect. Thus, continual monitoring

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



of the site during the construction phase will help and aid in the identification of impacts as, and when they occur.

2.4. The Operational Phase

As elucidated hereinabove, this updated EMP pertains to the existing bulk storage facility owned and operated by **Desert Storage CC – Farm 38, Walvis Bay.** As such, this updated EMP will mainly refer to and focus on the current operational phase. Potential environmental impacts arising during the current operational phase can be minimized through the implementation of, and the abidance to the updated EMP.

3. ANTICIPATED ENVIRONMENTAL IMPACTS

The anticipated adverse impacts requiring mitigation relating to the biophysical and socioeconomic environment for the current operational phase of the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility, are listed below:

Operational Phase - Adverse Impacts:

- Noise pollution and intrusion,
- Visual intrusion and light pollution,
- Traffic,
- Atmospheric pollution and odours,
- Safety and security,
- Soil and groundwater contamination (surface spillage of fuel),
- Risks of fires and explosions, and
- Waste generation and disposal.

4. RESPONSIBILITIES

The Environmental Management Plan (EMP) specifies the responsibilities of the role players.

Desert Storage CC – Farm 38, Walvis Bay remains ultimately responsible for ensuring that the facility is implemented according to the requirements of the EMP throughout all phases of the project. This includes the current operational phase and if any upgrades or construction take place on or at the existing **Desert Storage CC – Farm 38, Walvis Bay** bulk storage facility.

• The Environmental Control Officer (ECO): the ECO is appointed by the developer as an independent monitor of the implementation of the EMP i.e. independent of the developer and contractor. The ECO is responsible for providing feedback on potential environmental problems associated with the development. The ECO has the right to enter the site and do monitoring and auditing at any time, subject to compliance with health and safety requirements applicable to the site (e.g. wearing of protective head gear and safety boots). The ECO will be responsible for a minimum of monthly site audits, followed by an environmental control report, that will detail the status of environmental compliance, and highlight mitigation. The ECO will be responsible for liaising with authorities, MEFT. The ECO must submit monthly environmental audit reports to the authorities. The ECO must indicate the necessary corrective action measures to eliminate the cause of the non-conformances. The ECO is also responsible for liaising with contractors, informing them of any decisions that are taken concerning environmental management during the construction phase. This would also include informing the contractors of the necessary corrective actions to be taken.

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



- **Site Agent:** is usually a site engineer or project manager who is the developer's most senior representative on site and coordinates activities on site. The site agent must follow the advice of the ECO with regards to environmental management and ensure that the contractor abides by all requirements stipulated by the ECO.
- Contractor: the contractor as the developer's agent on site, is bound by the Clearance
 Certificate and EMP conditions through his/her contract with the developer and is
 responsible for ensuring that conditions of the EMP are strictly adhered to at all times.
 The contractor must comply with all orders (whether verbal or written) given by the ECO,
 project manager or site agent in terms of the EMP.
- The Environmental Liaison Officer (ELO): The Contractor shall submit to the Site Agent a nominated representative of the Contractor as an ELO to assist with day-to-day monitoring of the construction activities for the contract. Issues raised by the ECO will be routed to the ELO for the contractor's attention. The ELO shall be permanently on site during the construction phase to ensure daily environmental compliance with the EMP. The ELO should preferably be a senior and respected member of the construction crew, as past experience has revealed that ELO's that can relate to the workforce are most effective for information transfer and ensuring compliance with the EMP. The ELO will report directly to the ECO regarding environmental compliance. The site audits undertaken by the ECO will be undertaken alongside the ELO. The ECO will point out areas of concern, and the ELO will be responsible for ensuring day to day compliance with the EMP. Should any emergencies arise, the ELO will alert the ECO who will take action. There shall be an approved ELO on site at all times. Before the Contractor commences with each Construction Activity, the ELO shall give to the site agent a written statement setting out the following:
 - The type of construction activity.
 - Locality where the activity will take place.
 - Identification of impacts that might result from the activity.
 - Identification of activities or aspects that may cause an impact.
 - Methodology for impact prevention for each activity or aspect.
 - > Emergency/disaster incident and reaction procedures (need to be demonstrated).
 - > Treatment and continued maintenance of impacted environment.
- Community Liaison Officer (CLO): the contractor must appoint a CLO to act as a point
 of contact between the contracting team and the community that will be affected by the
 construction activities. Complaints from the community about construction activities must
 be channelled through the CLO. The CLO's responsibility is to liaise with the Interested
 and Affected Parties.

5. IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS

Desert Storage CC – Farm 38, Walvis Bay's activities have the potential to impact the biophysical and socio-economic environment. Environmental aspects and potential impacts were identified during the screening and scoping phases, in consultation with authorities, Interested and Affected Parties and the environmental specialists.

The relevance of the potential impacts ("screening") are also presented in the tables below to determine if certain aspects need to be assessed in further detail. The potential impacts can also be assessed as part of this process.

The tables below provide a summary of the environmental aspects and impacts associated with the existing bulk storage facility owned and operated by **Desert Storage CC – Farm 38**, **Walvis Bay**.

Date: Company:		Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



The following tables form the core of this EMP for the current operational phase of the project. These tables should be used as a checklist on site. The aim of this EMP is to derive measures that should be implemented during the current operational phase.

Table 2: Operational Phase

OPERATIONAL PHASE						
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE		ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
BENEFICIAL IMPACTS		•				
Socio-economic						
1. Job Opportunities and Economic Upliftment	Advantages for local previously disadvantaged communities in terms of employment, empowerment and socioeconomic upliftment.	•	The development has resulted in the creation of jobs. The project increases skills development and also local employment in the area. Both short-term and long-term employment has been created in this case. The project will lead to the increase in the number of convenience facilities in the primary market area.	Record of local employees employees.	Developer	Operational phase
2. Contribute to the upgrading of the existing infrastructure	Improved municipal services.	•	All recommendations made by the civil, traffic and electrical engineer and approved by the Local Town Council will be installed as per the standard specifications.	infrastructure as per approved engineering	Developer, Traffic, Engineer, COJMM, and Environmental Control Officer	Construction and operational phases
Bio-physical	The many sector for the sector of	1_	All 1 15 1 1 0 1 1	Landagana Davalanii	0	D
1. Removal of exotic plant species and the establishment of indigenous vegetation.	The removal of exotic plant species and the planting of indigenous vegetation within landscaped areas will increase biodiversity.	•	All classified Invader Species in terms of the said Act will be identified, eradicated and controlled.	Plan	Contractor, Landscape Architect, Environmental Consultant,	Design, planning, and construction phases

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



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TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE		ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
		•	The Landscape Development Plan must as far as possible make use of indigenous trees and plants. The use of exotic species must be limited.		and Environmental Control Officer	
ADVERSE IMPACTS						
Socio-economic						
1. Visual Intrusion and Light Pollution	To mitigate the potential negative impact on "genius loci" and visual impact, should architecture not be in line with natural character of the area, through the appropriate application of form, scale, materials and finishes.		Light pollution should be minimized. Littering, rubbish and illegal dumping on the site is not allowed. Refuse must be contained and disposed of at the municipal land fill site. Refuse bins must be provided. These must be sufficient in number and must be easily accessible. The buildings may not be visually intrusive. The buildings must be painted regularly. All lights used for non-security purposes should be energy efficient, for example compact fluorescent lights (CFL). Fluorescent lamps give five times the light and last up to 10 times as long as ordinary bulbs. Outside lights will have to be downward shining (eyelid type), low wattage and should not be positioned higher than 1 m above the ground surface Signs must conform to Local Municipal Standards.	surrounding property owners.	Developer, Architect, Landscape Architect.	Planning and operational phases

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE						
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE		ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
		•	Areas that have been landscaped must be maintained. The site boundary will be erected around the site, thereby, securing the activities of the Bulk Storage Facility from the adjoining sites.			
2. Traffic	Possible increased pedestrian hazard and increased road damage.		Access to the site is from an existing	users.	Developer and Traffic Engineer	Planning, design and operational phases

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE						
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE		ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
3. Noise	To minimize the impact of noise on surrounding properties and the environment.		Noise levels shall be kept within the acceptable limits, and forecourt staff must abide by National Noise Laws and local by-laws regarding noise. If any mechanical equipment is used, noise reduction facilities must be used as per the operating instructions and maintained properly. Noise levels should comply with the SANS Code of Practice 100103-0994 for recommended noise levels.	surrounding property	Developer, Contractor Management	Construction and operational phases
4. Atmospheric Pollution and Odors	Minimize atmospheric pollution and odors.		Emissions from the Bulk Storage Facility and associated infrastructure will be low level and thus disperse into the atmosphere	health incidents or	Developer, Contractor, Management	Construction and operational phases
5. Safety and Security	Ensure safety and security of staff and users of the facility.	•	Appropriate measures should be in place for the correct storage, transportation, and handling of products as well as the procedures for dealing with dangerous situations.	training for staff.	Developer, Contractor, Management.	Construction and operational phases

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE							
TASK/ ENVIRONMENTAL IMPACT	OBJECTIV	/E		ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
Bio-physical			-	Staff should be adequately trained with respect to dealing with crime. Equipment and materials must be handled by staff that have been supervised and adequately trained. Staff must be regularly updated about the safety procedures. Emergency facilities must be available and adequately supplied for the use by staff and customers. Emergency contact details for the police, Security Company and fire department must be readily available.			
1. Soil and Groundwater Contamination	Prevent soil and contamination.	groundwater	-	equipment must be located on a	Record of regular training of staff	Developer, Management, Environmental Control Officer	Planning, construction and operational phases
2. Subsurface leaks	Prevent soil and contamination.	groundwater	•	Staff must be trained adequately so as to identify and minimize the impacts of leaks. Cathodic protection will prevent corrosion in pipelines.	Contingency Plan.	Developer, Engineer, Environmental Control Officer	Operational phase.

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE					
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE	ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
		monitoring program must be implemented to ensure that the groundwater resources are protected. Product and raw material stocks must be reconciled on a monthly basis.	Record of regular Monitoring.		
3. Risks of Fires and Explosions	Prevent emergency incidents.	 The Bulk Storage Facility and 	Approved Emergency Response Plan. Record of regular training of staff. Record of regular monitoring.	Developer, Engineer, COJMM, Proposed Bulk Storage Facility and associated infrastructure Management, Environmental Control Officer	Planning, construction and operational phases

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE					
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE	ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
		 "NO CELLPHONES" Staff must be trained adequately so as to identify and minimize the impacts of leaks and to deal with fires. 	Damoural of weath to		
4. Waste Generation and Disposal	Prevent pollution of ground and surface water and the environment as a whole.	 Solid waste generated needs to be collected at a central point. This waste will be disposed of as normal domestic waste at the closest municipal waste disposal site, in this case being in Walvis Bay. The Waste Management and Pollution Control Act covers all aspects relating to waste management and must be adhered to at all times. Any other relevant legislation must also be adhered to. Waste management at the Bulk Storage Facility and associated infrastructure should be strictly controlled and monitored. Only approved waste disposal methods shall be allowed. Management of the Bulk Storage Facility and associated infrastructure shall ensure that all personnel are instructed on the proper disposal of all waste. Staff training should be undertaken every six months to capacitate staff in terms of waste minimization and waste disposal. No burning, on-site burying or dumping of waste shall occur. 	certified land fill sites.	Developer, COJMM, Waste Removal Contractor, Engineer, and Environmental Control Officer	Operational phase

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



OPERATIONAL PHASE					
TASK/ ENVIRONMENTAL IMPACT	OBJECTIVE	ACTION REQUIRED	TARGETS TO MONITOR COMPLIANCE AND REPORTING THERE ON	RESPONSIBILI TY	TIME FRAME
5. Transportation of Product	To ensure that the product is transported in a safe and regulated manner.				

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



ANNEXURE A: ENVIRONMENTAL INCIDENT LOG

Date	Incident	Comments (Include any possible explanations for current condition and possible responsible parties. Include photographs, records etc. if available)	Mitigation Measure (Give details and attach documentation as far as possible)	ECO Signature

Date:	Company:	Occupational Hygienist:	Project No:
13 th of November 2025	Desert Storage CC – Farm 38, Walvis Bay	Johan Cornelissen	2025 / 269 / K



ANNEXURE B: COMPLAINTS RECORD SHEET

RECORD OF COMPLAINTS	PAGE	OF	DATE:	1 1
Complainant:				
Capacity of complainant:				
Complaint recorded by: Complaint:				
Complaint:				
Corrective measure:				
Confeditive measure.				
ECO:	Date:			
Notes by ECO:				



ATTACHMENT A Certificates





MINISTRY OF LABOUR, INDUSTRIAL RELATIONS AND EMPLOYMENT CREATION

Tel. (061) 2066111 Fax. (061) 212323

david.shinime@mol.gov.na

12/24

Mr. DM Shinime

Private Bag 19005 32 Mercedes Street,

Khomasdal

WINDHOEK

Certificate of Registration as an Approved Inspection Authority

In terms of Regulation 18 of the Regulations relating to Health and Safety of Employees at work made under

Schedule 1(2) of the Labour Act, 2007(Act 11of 2007)

Authorization Number:

24/175

A.I.A. 24/175

This is to certify that: National Environmental Health Consultants CC

P O Box 8416 Swakopmund

Has been approved as an Inspection Authority

Approved	Competencies
----------	--------------

Name of the only person who is deemed competent to render the approved services

Occupational Hygiene, Noise, Dust, Illumination, Temperature, Stress, Ventilation, Ergonomics, Lead, Asbestos, Radiation, Vibration and Biological Monitoring. Implementation, Training ISO 9001, 14001, and 45001. OSHE Training and Audiometric Testing

Johan Cornelissen (ID No: 6504085019086) Rion Cornelissen (ID No: 96030101177)

From: 17 January 2025 - 17 January 2026

Chief Inspector:

2025 -01- 14

Mr. J. Shihepo

All official correspondence must be addressed to the Executive Director

Date: Company: Occupational Hygienist: Project No: 13th of November 2025 Desert Storage CC - Farm 38, Walvis Bay Johan Cornelissen 2025 / 269 / K





CERTIFICATE OF ACCREDITATION

In terms of section 22(2)(b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 23(1), (2) and (3) of the said Act, I hereby certify that:-

NATIONAL ENVIRONMENTAL HEALTH CONSULTANTS CC Co. Reg. No.: 1996/044367/23 SWAKOPMUND, NAMIBIA

Accreditation Number: OH0057

is a South African National Accreditation System accredited Inspection Body to undertake TYPE A inspection provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying scope of accreditation, Annexure "A", bearing the above accreditation number for

OCCUPATIONAL HYGIENE INSPECTION AT WORKPLACES

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17020:2012

The accreditation demonstrates technical competency for a defined scope and the operation of a management system

While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates

> Ms FS Radebe Acting Chief Executive Officer

Effective Date: 03 October 2022 Certificate Expires: 02 October 2026

This certificate does not on its own confer authority to act as an Approved Inspection Authority as contemplated in the Occupational Hygiene Regulations. Approval to inspect within the regulatory domain is granted by the Department of Employment and Labour.

Date:Company:Occupational Hygienist:Project No:13th of November 2025Desert Storage CC – Farm 38, Walvis BayJohan Cornelissen2025 / 269 / K





The Southern African Institute for Occupational Hygiene

This is to certify that

Johan Cornelissen J

ID Number: 6504085019086

Has satisfied the requirements of the Constitution of the Institute and on recommendation of the Professional Certification Committee is registered as an

Occupational Hygienist (OH)

Member Number: 159

Valid until: 31 January 2026

J. m.

Dr Ivan Niranjan

Chairperson: Professional Certification Committee



Member ID: 33914526

Certificate ID: 33914526-29893

Issued by the Southern African Institute for Occupational

Hygiene

SAQA Professional Body ID: 844

IOHA Recognised Certification Scheme







The Southern African Institute for Occupational Hygiene

This is to certify that

Rion Cornelissen

ID Number: 9603015178082

Has satisfied the requirements of the Constitution of the Institute and on recommendation of the Professional Certification Committee is registered as an

Occupational Hygiene Technologist (OHT)

Member Number: 1926

Valid until: 31 January 2026

J. m.

Dr Ivan Niranjan

Chairperson: Professional Certification Committee



Member ID: 64712911

Certificate ID: 64712911-29892

Issued by the Southern African Institute for Occupational

Hygiene

SAQA Professional Body ID: 844

IOHA Recognised Certification Scheme

