TABLE OF CONTENTS

1. INTRODUCTION

Virgo Biotechnology Pty Ltd is a 100% Namibian registered entity, initiated by business Namibians to participate in and benefit from Namibia's marine time commercial trade industry through harvesting rights and quota allocations for culling of 1000 to 2000 seals per annum. In early 2025, Virgo Biotechnology Pty Ltd applied for land development in Henties bay where it was allocated a 25 hectare of land on portion 105 of Henties bay townlands. The Company is part of many companies that were granted Seal harvesting quotas and harvesting rights from the relevant Ministries and agencies. The many objectives of acquiring the Seal harvesting rights is mainly for local processing, commercial retail and trade through exporting of processed products from Namibia to Asian and Chinese international markets.

Virgo Biotechnology Pty Ltd therefore intend and propose to set up or construct a state-of-the-art Seal Oil and Seal product processing plant within Henties Bay townlands on portion 105. In December 2024 to 2024 financial year, Virgo Biotechnology Pty Ltd through Ministry of fisheries and aquaculture was awarded seal harvesting right in the ocean waters of Namibia.

The Company chose Henties bay as their ideal town where the Company wants to establish a Seal Oil and Seal product processing plan. The Company identified Henties bay as the ideal town for construction and development of this processing plant, given the minimum distance between the town and the sources of raw materials where Seals will be harvested. The site for Seal harvesting and culling is Cape cross and Torra bay situated about 50 to 52 kilometres from Henties bay in Erongo district.

In order to fully realise the business potential of this right, the company intends to setup a seal oil and seal product processing plant on portion 105 Henties bay townland no. 133 where the harvested seal shall be cleaned, segmented, processed, packaged and exported and/or sold for local and international markets. The processing plant shall process products such as seal oil, seal skins for pelts, meat, seal genitals, blubber and other by-products.

The intension is to establish a seal product processing plant that will process seal products into finished products with value addition to the products. In future, the Company intend to explore and

invest in other seal related byproducts such as processing of Mangetti Nut to produce Mangetti nut oil, production of Health supplement products like production of seal capsules for medication, cosmetic creams and body skin care products from seal oil products. This will be considered in the long run of business operation.

Figure 1: Locality of Henties bay, Erongo region.

The Ministry of Fisheries and Marine Resources allocates a Total Allowable Catch (TAC) for seals on an annual basis. Virgo Biotechnology Pty Ltd has acquired majority shareholding of all Companies in the Seal production business in Namibia. This is to ensure and restore control on seal product pricing, competition among local companies and to ensure and promote seal product value addition, which will see Virgo Biotechnology producing processed final products which will general more income and revenues on the exchange stock markets

The Ministry of Fisheries and Marine Resources grants our right holders a quota of around 600 Bulls and 2000 Pups per annum. The culling period usually starts in July to December of every year. After completion of this State-of-the art seal product processing plant, the Company will have the capacity to harvest 8000 Bulls and 40000 Pups per annum.

The proposed Seal product processing will comprise of 30 permanent skilled staff members. On-season will comprise of 50 seasonal semi-skilled and 5 skilled workers (giving a total of 85-100 employees) to carry out the task of harvesting which is seasonal between July to December annually. Virgo Biotechnology Pty Ltd appointed by Nyepez Consultancy cc to apply for acquisition of the Environmental Clearance Certificate for compliance purposes. The Environmental Impact Assessment (EIA) will conduct under the requisites of the Environmental Management Act (EMA) (Act 7 of 2007) and its Regulations (2012).

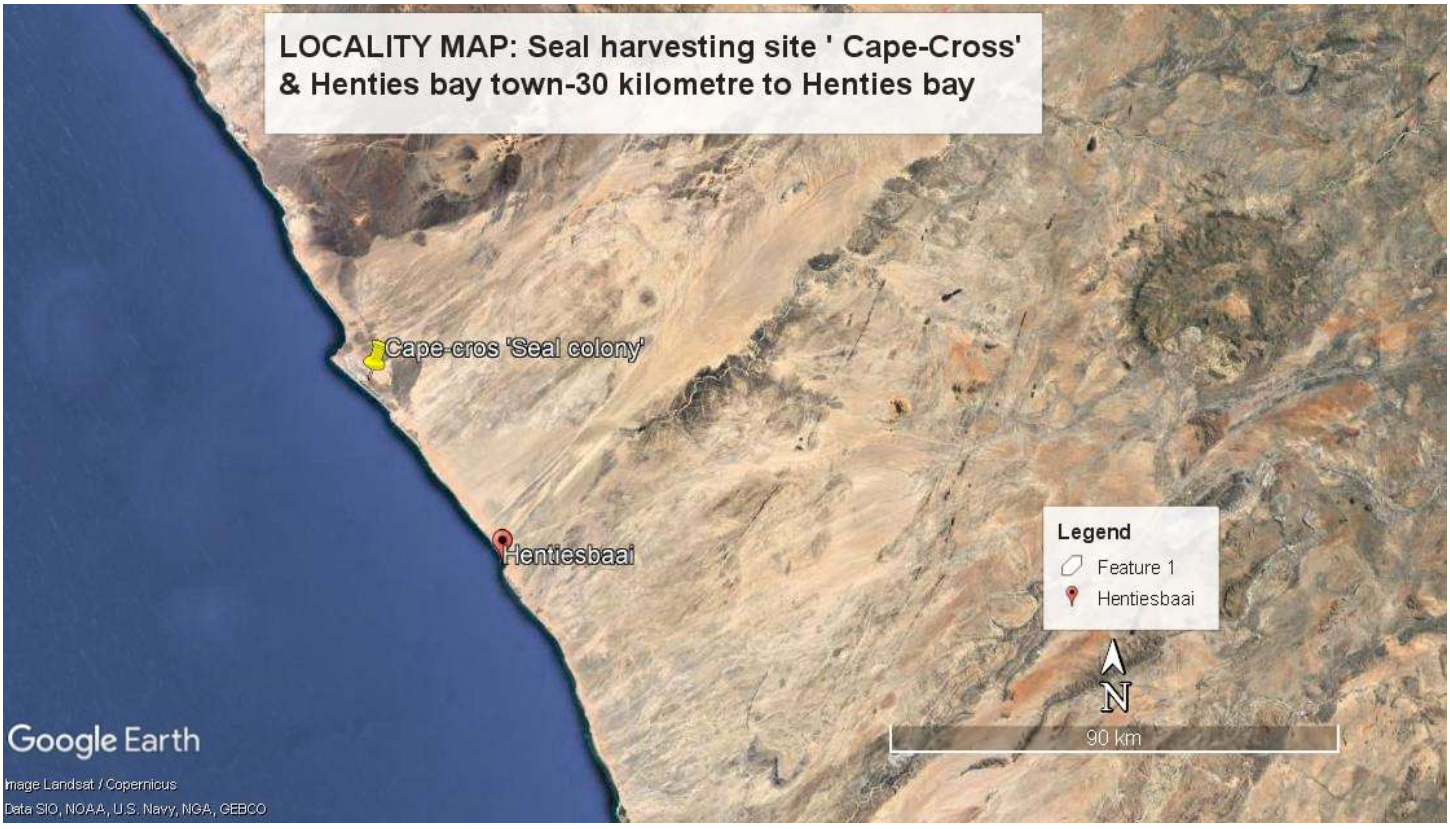

Figure 2: Locality of Cape cross seal colony vs. Henties bay Project Area

The “site” is situated alongside the C34 M0044 Swakop- Terrace Bay Road. The site is also situated immediate next to other proposed industries such as Aquaculture farm and existing and operational Tulongeni agricultural garden. The proposed site is currently surveyed with a registered General Plan. The site (portion 105) has no services on-site; however, Bulk services are located nearby the project area. The site is currently vacant and is zoned undetermined.

The proponent acquired approval from both Henties Bay Municipality and the Minster by following legal land acquisition procedures, with the purpose of establishing a Seal oil and seal product processing, production, and exporting hub. The implementation of the project will be done in phases. Phase 1 is levelling of the land, Phase 2 is the setting up of the construction workers shelter, Phase 3 will be the construction of temporal ablution facilities and the construction of seal product plant development.

C/o Jakkalsputz road and Nicky Iyambo Avenue, Henties Bay, Namibia
P.O. Box 61, Henties Bay Tel: +264 (0) 64 502 000 Fax: +264 (0) 64 502 001
Website: www hbaymun com na

Inquiries: Town planning **Cell: 064- 502000**	My Reference: C016/24/02/2025/02nd/2025	**Email:** Planning@hbaymun.com.na	**Date:** 26 February 2025

The Managing Member
Vigor Biotechnology PTY Ltd
P O Box 21225
WINDHOEK
NAMIBIA

Dear Mr Charlie Xie

RE: APPLICATION TO PURCHASE PORTION 105 OF THE FARM OF HENTIES BAY TOWNLAND NO. 133 FOR ESTABLISHMENT OF A SEAL OIL & SEAL PRODUCTS PROCESSING PLANT: MESSRS VIGOR BIOTECHNOLOGY PTY LTD [7/3/2/2]

Council *consensus as idem* resolved by

CO16/24/02/2025/02nd/2025

THAT:

(a) In terms of Section 30(1)(t) of the Local Authorities Act, 1992 (Act 23 of 1992), the sale of portion 105 of the farm of Henties bay townland in extent of 25,7201 hectares (Situated North of Henties bay) to Messrs Vigor Biotechnology Pty Ltd by way of private treaty for the development of a Seal Oil & Seal Products Processing Plant be approved;

(b) In terms of section 30 (1) (t) of the Local Authorities Act no. 23 of 1992, the sale of land 25,7201 hectares (257 201 m²) by way of private treat to Messrs Vigor Biotechnology Pty Ltd at an estimated purchase price of N$ 1, 286 005 (One Million, Two Hundred & Eighty-Six Thousand and five Namibian Dollars) at market related land price be approved;

(c) The intended alienation be advertised in two local newspapers for two consecutive weeks, the applicant to bear the cost for such placements in the printed media.

(d) CONSENT to start construction and development be GRANTED by Council while the developer waits for all statutory approvals from relevant Ministries or agencies, on condition that an Environmental Impact assessment (EIA) is also carried out concurrently with the planning and construction phase to comply with the requirements of Environmental Act 7 of 2007.

(e) All municipal services infrastructure be designed and constructed to the satisfaction of the Council at the developers' cost.

(f) Messrs Vigor Biotechnology Pty Ltd through their corporate social responsibility to assist the Council with Engineering Drawings for the expansion of Sewerage Plant. Additionally support the Council in establishing a twinning partnership with sister municipalities in China.

Yours sincerely

IGNASIA FLORENCIA NEIS
ACTING CHIEF EXECUTIVE OFFICER

MUNICIPALITY OF HENTIES BAY
CHIEF EXECUTIVE OFFICER
26 FEB 2025
TEL: 064-502111
MUNICIPALITY OF HENTIES BAY

All correspondences to be addressed to the Chief Executive Officer

Progress Through Unity

Figure 3: Council resolution on land allocation to Virgo Biotechnology Pty Ltd

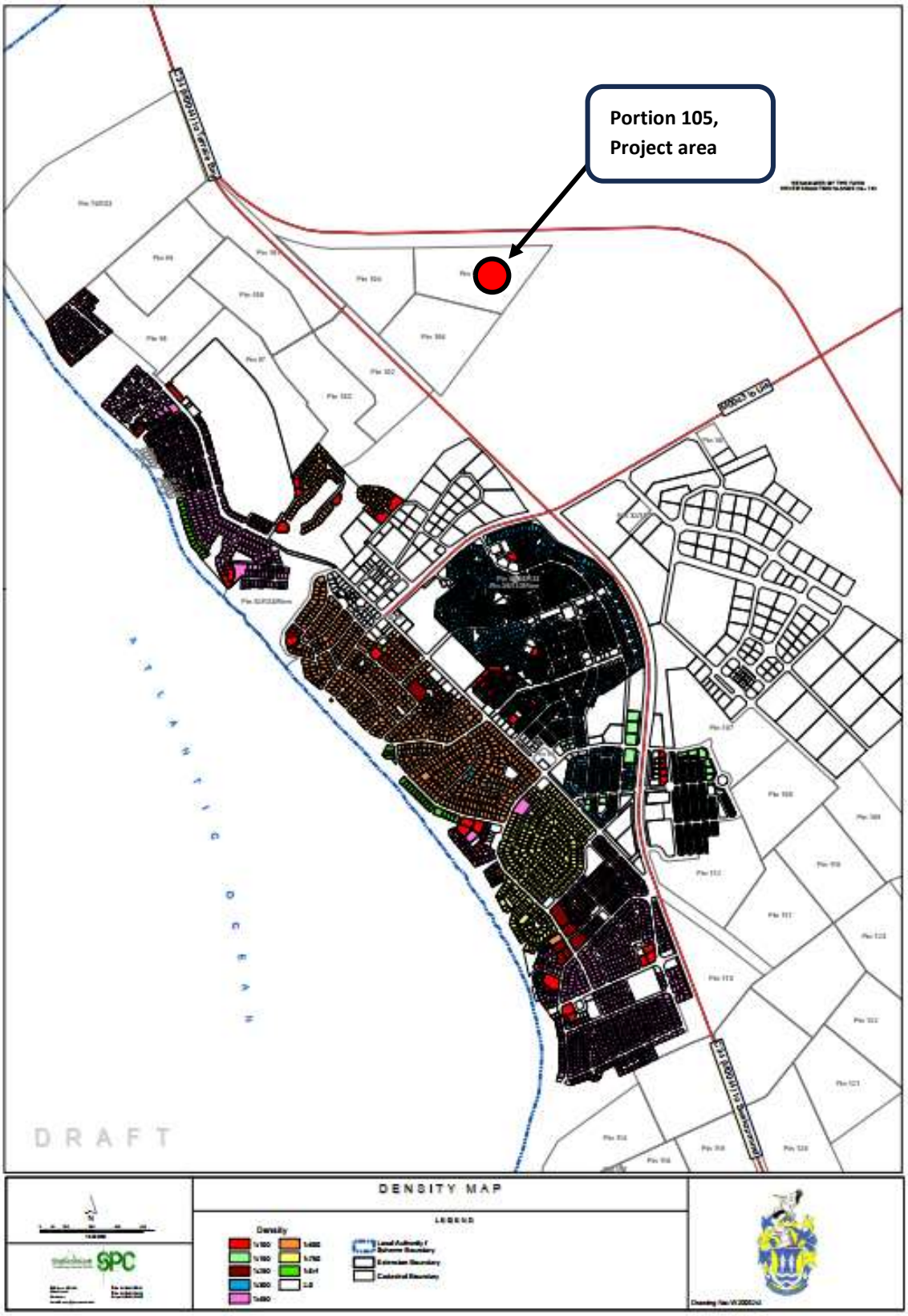

Figure 4: Locality of Project area (portion 105)

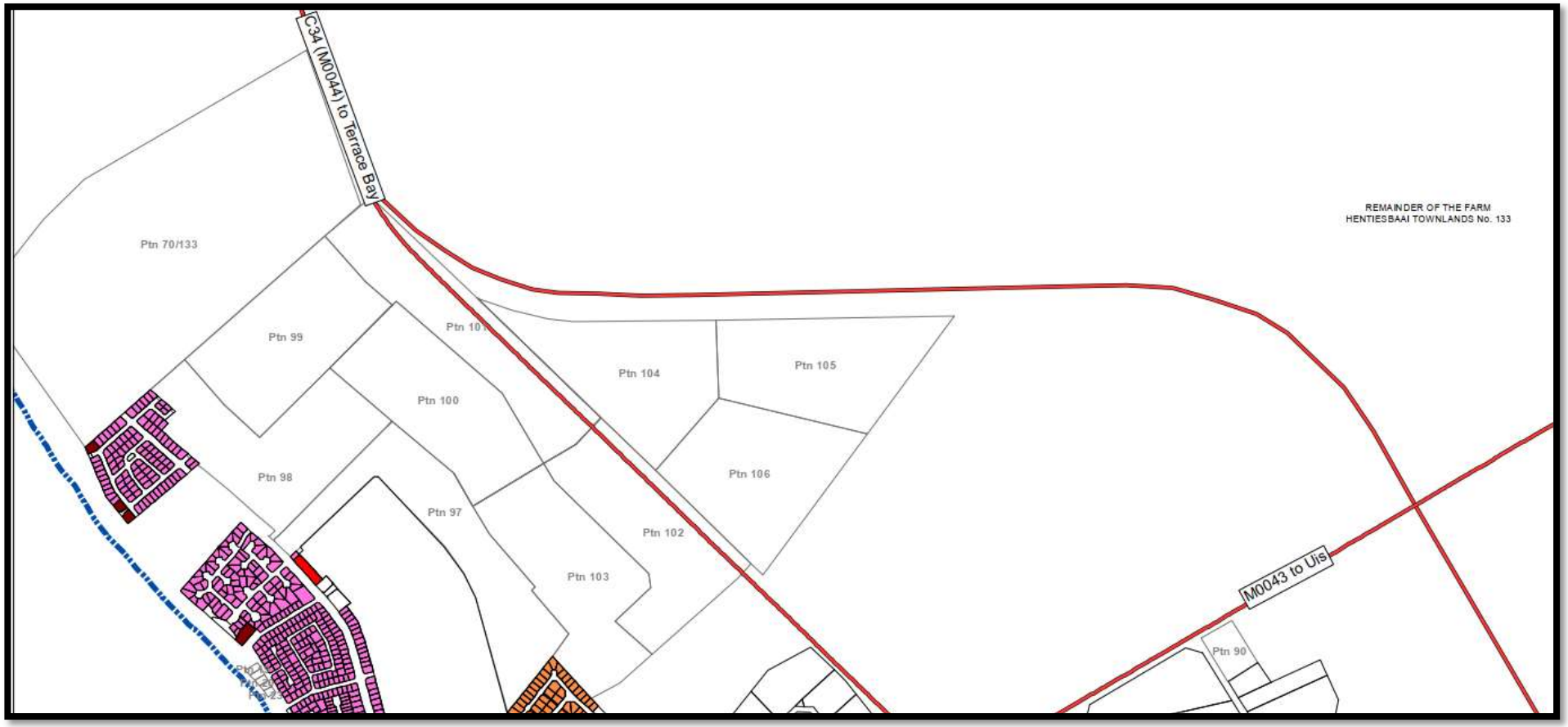

Figure 5: Locality of Project area (portion 105)

The land is currently zoned Undetermined as it falls within the Henties Bay Townlands. The project site is situated a few distance from the existing Seal product Company and few meters from the existing and operational Tulongeni gardens specializing agriculture small crop farming. Other development within the project surrounding area is the proposed Aquaculture farm, the existing & operational Aircraft hangers and Chinese Zhngomei road construction administration workshops.

Figure 6: Surrounding nearby existing developments: Grow Green Initiative agricultural area

1.1 Who Is Conducting the Environmental Impact Assessment?

In line with the Environmental Management Act of 2007 and EIA Regulations of 6 February 2012, the Proponent has appointed an independent consultant, Nyepez Consultants to undertake the Environmental Impact Assessment for this project. Nyepez Consultancy cc is experienced in environmental management and assessment, familiar with the EIA requirements for construction of school development and rehabilitations of projects and has experience working in the project area. Nyepez Consultant are well known for its integrity, independence and skill in assisting stakeholders to participate in the EIA process. The consultants have signed declarations of independence in terms of the EIA regulations, best practices, which confirms that they have no vested interest in the proposed project.

1.2 Motivation for The Proposed Project

The rationale of this proposed project and intension of establishing this Seal oil and Seal Product processing plant is to establish a plant that will process seal products into finished products with provision of value addition to the products, to help enhance the seal pelt skin export production, agricultural food supply & livelihood upliftment in Henties Bay. This development will address the employment creation, food shortage in Henties Bay, and will uplift local community livelihood thereby creating employment opportunities in the town.

In addition, other spin offs will be regional economic boost through quality of life and wealth accumulation. In future, the Company intend to explore and invest in other seal related byproducts such as processing of Manketti Nut to produce Manketti nut oil, production of Health supplement products like production of seal capsules for medication, cosmetic creams and body skin care products from seal oil products. This will be considered in the long run of business operation

Figure 7: List of Seal Oil and Seal products to be manufactured by Virgo Biotechnology Pty Ltd

1.3 Legal Requirements

The Department of Environmental Affairs (DEA) in the Ministry of Environmental and Tourism (MET) regulates all Environmental Assessment activities as outlined in the Environmental Management Act of 2007 (EMA) and Environmental Management Regulations of 6 February 2012. The Environmental Management Act (EMA) sets out the objectives of EIAs in Namibia and makes provisions, among other things, for the listing of activities that may not commence without an environmental authorization.

Key policies currently in force include:

- Namibia's Environmental Assessment (EIA) Policy for Sustainable Development and Environmental Conservation (1995).
- The Minerals Policy of Namibia (2002).

The proponent (Virgo Biotechnology Pty Ltd) appointed Nyepez Environmental Consultants to undertake the Environmental Scoping Assessment (ESA) in order to obtain an Environmental Clearance Certificate (ECC) for the above proposed project in Henties Bay. The competent authority is the Ministry of Environment and Tourism: Department of Environmental Affairs (MET: DEA).

1.3.1 Applicable Laws and Policies

In the context of listed activities for infrastructural development in Namibia, there are several laws and policies currently applicable. Each of these is discussed in detail below.

1.3.2 Environmental Management Act

To enforce the policy on EIAs, the Environmental Management Act (EMA) (7 of 2007) has been compiled but is yet to practically come into force because the required regulations are still in draft form. The EMA is expected to improve the management of impact assessments in Namibia through the establishment of an environmental commissioner, who will approve environmental plans and

through requiring government agencies to work as a cohesive decision-making agent to ensure long term sustainable resource use.

1.3.3 The Water Act

The Water Act (54of1956) regulates the abstraction of groundwater for mining purposes. This Act is also an example of the older legislation which does not meet the needs of Namibia's modern development patterns. In recognition of this, the Water Resources Management Act (24of2004) has been drafted and published. It is still to come into force. This Act is more relevant to addressing Namibia's geo hydrological and climatic contexts.

1.3.4 The Namibia Water Corporation

The Namibia Water Corporation Act (12of1997) charges the corporation to supply bulk water, based on need and availability. The corporation is also charged with the duty of conserving water resources in the long-term.

1.3.5 The Forest Act

The Forest Act (12 of 2001) allows for the declaration of protected areas in terms of soils, water resources, plants and other elements of biodiversity. This includes the proclamation of protected species of plants and the conditions under which these plants can be disturbed, conserved, or cultivated.

1.3.6 Parks and Wildlife Management Bill

The Parks and Wildlife Management Bill (2009) aims to provide a legal framework for the sustainable use and maintenance of Namibia's ecosystems, biological diversity and ecological processes; and repeals the Nature Conservation Ordinance (4 of 1975). This Bill allows the Namibian Ministries of Environment and Tourism, and Minerals and Energy, to allow mining to take place within parks subject to the relevant assessments and authorizations.

1.3.7 Nature Conservation Ordinance

The Nature Conservation Ordinance (4 of 1975) provides for the declaration of protected areas and protected species.

1.3.8 National Heritage

The National Heritage Act (27 of 2004) provides protection and conservation of places and objectives of significance, as all archaeological and paleontological objects belong to the state.

1.3.9 The United Nations Convention on Biological Diversity

This over–arching international convention is relevant to biodiversity conservation and management.

2. BACKGROUND TO THE PROPOSED PROJECT

The plant will be constructed and developed to accommodate the different processes required to produce the Bulk Seal oil and Seal product and by-products. The total cost to construct the processing plant is +- N$30 million. Products produced are likely to stay in its primary form, but with added elements to diversify usage. For example,

- Skins will be pelted then sold.
- Oil from the blubber will be made fit for human and animal consumption, as well as create biodiesel.
- The meat is usually processed and placed on the local and international markets.
- Seal Organ processing and licensed market set-off to international.
- Future processing of Manketti Nut to produce Manketti nut oil, production of Health supplement products like production of seal capsules for medication, cosmetic creams and body skin care products from seal oil products

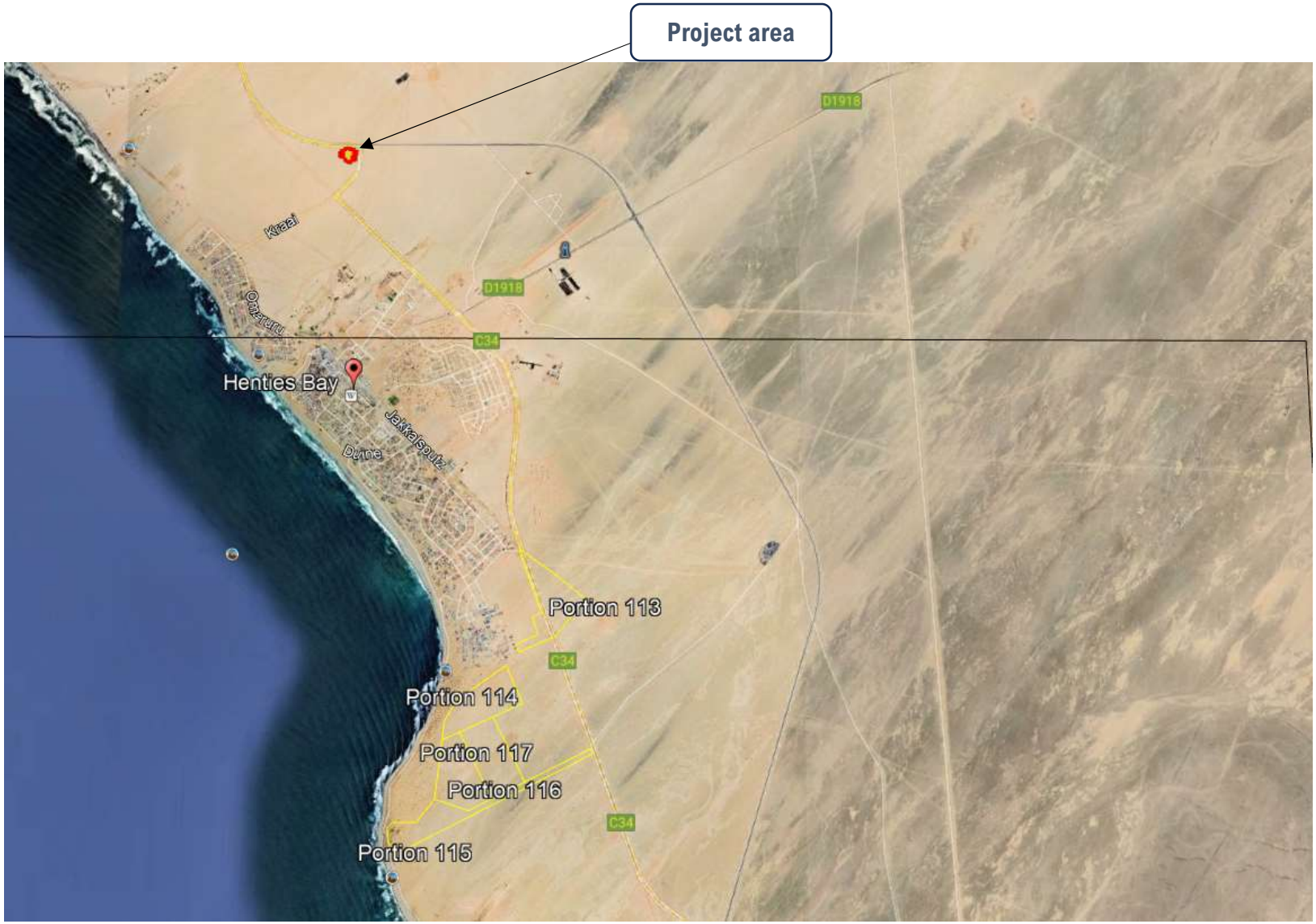

Figure 8: Locality of project area in Henties bay

The land is currently zoned Undetermined as it falls within the Henties Bay Townlands. The project site is situated few meters (50meter) from the Henties Bay -Terrace Bay Road, but situated along Swakopmund, Henties bay Cape-cross C34 M0044 main road. Other development within the project surrounding area is the Aircraft hangers and the Chinese temporal habitable worker's shelters. According to the Henties Bay Town Planning Zoning Scheme other land uses in close proximity to the project site area are predominantly zoned Agricultural, General business and light industrial, hence the proposed land use is deemed compatible to land use zoned under the Scheme.

3. CONSIDERATIONS AND ALTERNATIVES

The project proposes a new Infrastructural development for a modest Seal Oil and Seal product processing factory plant, to supplement or to takeover from the existing seal Company which has since seized operations since 2023. This new development initiative will promote the expansion to the existing Seal production development facilities and capacity co-owned by Virgo Biotechnology Pty Ltd. The intended establishment of the new seal plant will require a detailed assessment to ascertain if they will be any adverse impacts on the existing infrastructure (Land socio-economic, Land use and existing Bulk utilities) and towards the natural environment. The client does not intend to move to another different location, nor does he want to disturb any virgin land, as the proposed project site is within the disturbed environment where other developments has taken place in the past years. The site is to be already subdivided and will therefore be rezoned from "undetermined" to "General Industrial" to support and qualify he intended development.

3.1 Technology Alternatives

Nyepez Environmental Consultants are aware of different noise levels associated with building and constructions activities. This will be considered during the engineering design and planning phase of the project in order to minimize the effects of noise to adjoining land uses and residents. Similar application of technology measures will prevail for the following:

- Water discharge from constructional activities
- Construction techniques to limit dust and other air pollution issues

- Limit construction footprint to a minimal level
- Adopt best waste management practices

3.2 Planned Project Scheduling

If the financial, technical and environmental/social feasibility of the project is established, the proposed key dates for the project will be as the following:

Table 1: Key dates for project execution

Date	Milestone
March 2025	Initiate the EIA study
April 2025	Complete detailed design
April 2025	Draft, Review & Edit of EIA report to DEA for approval
April 2025	Comments & feedback from public/stakeholders
May 2025	Amend, review and finalization of EIA report, submission to DEA & await approval
July 2025	Commencement of construction (Client to confirm date)

3.3 Description of The Project

The Proposed site (portion 105 of Henties Bay Townland No.133) is surveyed and is situated within henties bay townland no. 133. The land size 25.77 hectares in total, zoned "Undetermined" and shall be rezoned to "General Industrial" inline with the Henties bay Zoning Scheme requires. The entire portion shall be for the development of Warehouse and building comprising of different compartments or sections of Seal Oil and Seal products; hence no internal subdivision will be conducted within the internal area of portion 105. Internal right of way street for the Company will be created but this will be for company operational activities and not for public usage. The Company will therefore focus on the following;

- Rezoning of land from "Undetermined" to "General Industrial"
- Planning/design of the development project,
- Pre-construction phase,
- Procurement of machineries and equipment's,
- Construction of physical buildings,
- Post-construction

APPROVED 25 JUL 2019

for SURVEYOR-GENERAL

No.A484/2019

SHEET 1 OF 2 SHEETS

SIDES	metres	ANGLES OF DIRECTION		CO-ORDINATES Y System: OSGB 15	X	Designation
A B	863.44	269.03.00	A	+73 764.21	+10 746.28	104e
B C	530.29	36.25.40	B	+72 900.89	+10 731.95	105b
C D	552.47	103.32.10	C	+73 215.77	+11 158.63	106c
D A	283.25	177.42.40	D	+73 752.89	+11 029.31	104f
			△	+74 067.58	+12 862.40	HWT
			△	+64 554.54	+9 110.21	Henty

BEACON DESCRIPTIONS

A - D ..... 16mm Iron peg in concrete

The figure A B C D

represents 25.7201 Hectares of land being

PORTION 105 OF THE FARM HENTIESBAAI TOWNLANDS NO.133

Situated in the Municipal Area of Hentiesbaai
Registration Division G, Erongo Region
Republic of Namibia

Surveyed in January 2019 by us

NATHANAEL HANGULA
Professional Land Surveyor

This Diagram is annexed to No. dated Registrar of Deeds	The original diagram is Transfer No.	S.R. No.E138/2019 Noting Plan: MD-N MD-1B File: G133

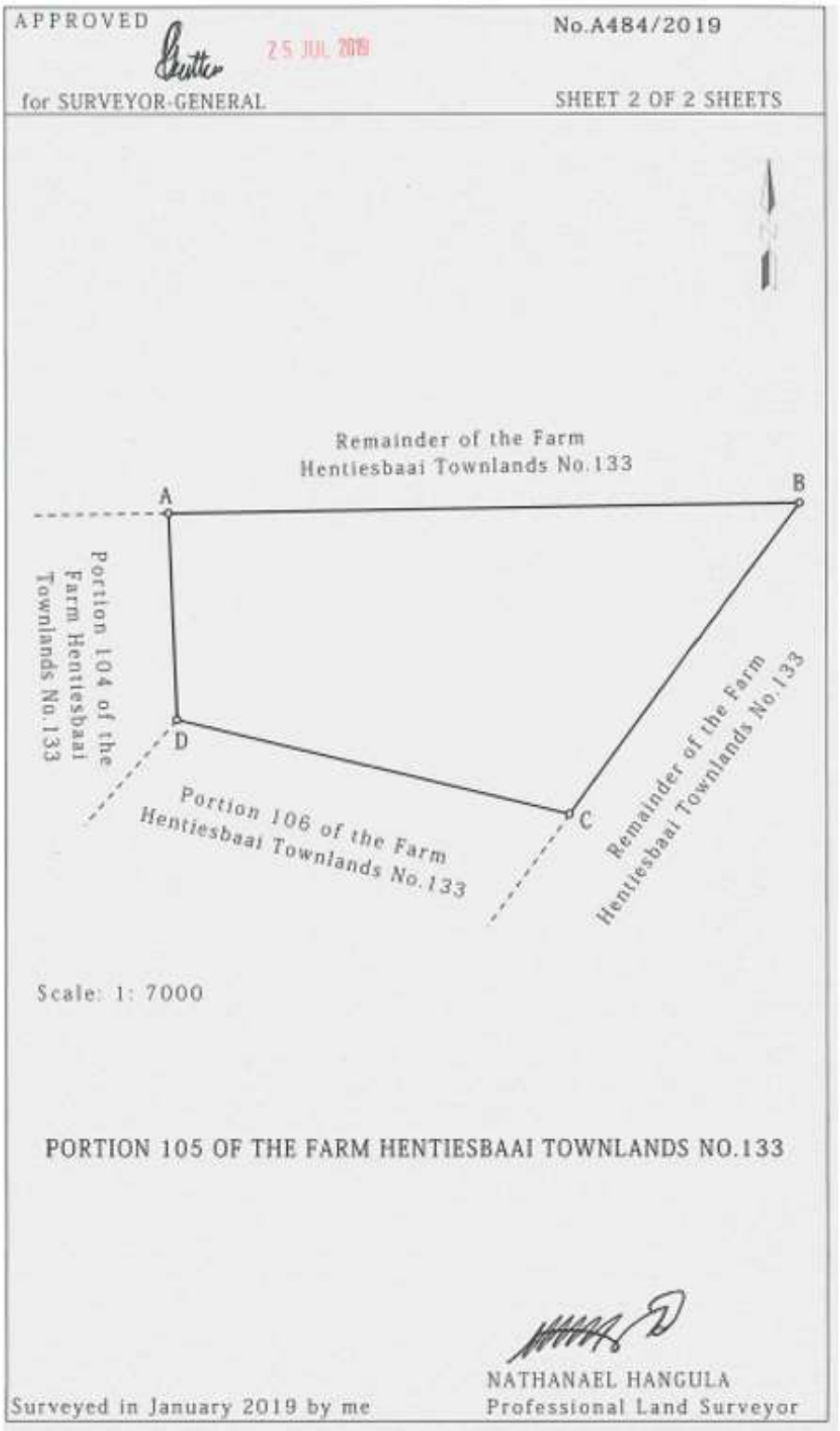

Figure 9: Approved survey diagram; Portion 105 of Henties bay townlands no. 133

In order to fully realise the business potential of this seal harvesting quota and harvesting rights, the company intends to setup a seal oil and seal product processing plant on portion 105 Henties bay townland no. 133 where the harvested animal Seals will be processed, packaged and exported and/or sold for markets. The processing plant shall process Seal products such as pelts, meat, blubber, Oil and other by-products.

The Ministry of Fisheries and Marine Resources allocates a Total Allowable Catch (TAC) for seals on an annual basis. In 2024, Virgo Biotechnology Pty Ltd received its quota allocation of 2000 units inclusive of both pups and adult bulls. Value will be added to all the products derived from the seals. The culling period usually starts in July to December of every year.

3.4 Planned Project Activities and Recommended Mitigation Measures

The project activities include those during the pre-construction (planning & setting up site camps before construction), construction and operational phases of the proposed Seal Factory processing plant facility expansion. Each activity has potential impacts on the environment hence the following mitigation measure must be respected all three phases.

3.4.1 Pre-Construction Phase

- **Surveying**: all sections of the proposed route have been surveyed in detail.
- **Fence**: the surveyed section will be temporarily fenced in order to constrain construction activities.
- **Plant relocation**: a search and rescue for any plant species of high conservation status. Environmental site officer must be appointed to oversee storage and relocations of these plants.
- **Clearing and grubbing**: the removal of all vegetation and topsoil in preparation of stable foundation for new construction works as well as along the proposed area and in areas set aside for construction camps.
- **Internal access road construction**: this will involve making access road for construction vehicle to use. In this case it will not be necessary as there is already an existing road. However, since they will be an increase in number of vehicles to site dust may be an issue – gravel road needs to be watered daily.

3.4.2 Transportation of Materials To Site

Road transport: Building Material sourced outside the study area will be transported to the site using the main road (Swakop-Henties bay, C34 M0044 Terrace Bay Road) by means of delivering these materials to site.

Figure 10: Access to project site: C34 M0044 Swakop- Henties bay-terrace bay road

3.4.3 Establishment of Construction Site Camps

Construction of temporary camps: these will be established by the contractor and might involve clearing of small vegetation, fencing of camps and construction of building material store rooms and vehicle parking areas. The camps will have provision for portable ablutions, bath tabs and potable water for consumption. An Environmental Management Plan (EMP) will be drafted as part of the EIA to describe parameters such as the following:

- A building plan from the contractor is required, detailing the layout of site facilities, such as chemical toilets, areas for stockpile of materials, storage for hazards materials and provision of containers.
- All waste generated will be stored in skip containers during construction phase and only a private registered waste collector or the municipality will be allowed to transport

waste from site to dumpsite. Any other waste will be stored in wheel bins as per provision by the municipality of Henties bay.

- All hazard waste such as chemicals and other solutions, will be transported to a registered dumpsite in Henties Bay upon consultations with the relevant authority.
- Fuel, gas will be stored in a secure area in a steal tank supplied and maintained by fuel suppliers in accordance with the law.
- Suitable washing and facilities and sanitary arrangements at site offices, workshops and construction sites will be provided. Sanitation facilities for the camps will comprise either prefabricated septic tank.
- Water for human consumption will be available at the site office.

3.5 Construction Phase

3.5.1 Earthworks

Clearing of vegetation: vegetation along the proposed area will be cleared and grubbed. Fortunately, the project area is classified as a barren open desert with no vegetation, hence no clearing of vegetation will be required as per the picture below.

Figure 11: Existing and adjacent developments to project area

3.5.2 Borrow Pit Establishment

Existing borrow pits designated by the local authority will be used. No new borrow pits will be established. If they will be a need to establish new borrow-pits, will be done in accordance with the local authority upon consultations.

3.5.3 Road Construction

No new access road or tracks to be establish, all contractors are to use the already existing C34 M0044 Swakop- Terrace Bay access road to the project site. Any road construction or upgrade to the existing access road such as earthworks, construction of pavement layers or drainage structures will be done in accordance with Roads Authority standards and requirements for roads and bridge works.

3.5.4 Site Removals and Rehabilitation

Site Removal consists of the removal of all building material, temporary structures and any other waste generated by the Company (Virgo Biotechnology Pty Ltd) during construction. All such materials will be removed from site and disposed of appropriately in accordance with the municipal procedures in place.

3.6 Operational Phase

Considering that the proposed developmental activity is situated within the townlands of Henties Bay local authorities, provisions for Physical building such as warehouse and manufacturing plant will be constructed. Furthermore, other utilities such as water supply, electricity and sanitation connections will be connected to the already existing grid with is within a short distance of (one) 1 kilometer. In consultation with the Henties bay Local Authority, the Company shall be responsible for all engineering services and connection of services to the project area upon approval of their proposed building plans.

Nyepez Consultancy cc promotes the idea of zero waste to dumpsite by encouraging its clients through waste recycling initiatives. It is with this background that Nyepez Consultancy cc advises the client to develop a waste management policy to guide the patrons of this Seal Oil

and Seal product Processing Plant on how to deal with waste. The Consultancy encourage initiatives such as waste segregation, reduce, reuse and recycle.

3.6.1 Manufacturing processes of Animal Seal Products & procedures

Virgo Biotechnology Pty Ltd will undertake the following industrial operational manufacturing procedure in order to produce value added seal products or production from the proposed seal processing plant. Below is a summary of the steps to be undertaken to produce finished animal seal products from raw animal seals.

3.6.1.1 Production Process for Seal leather products.

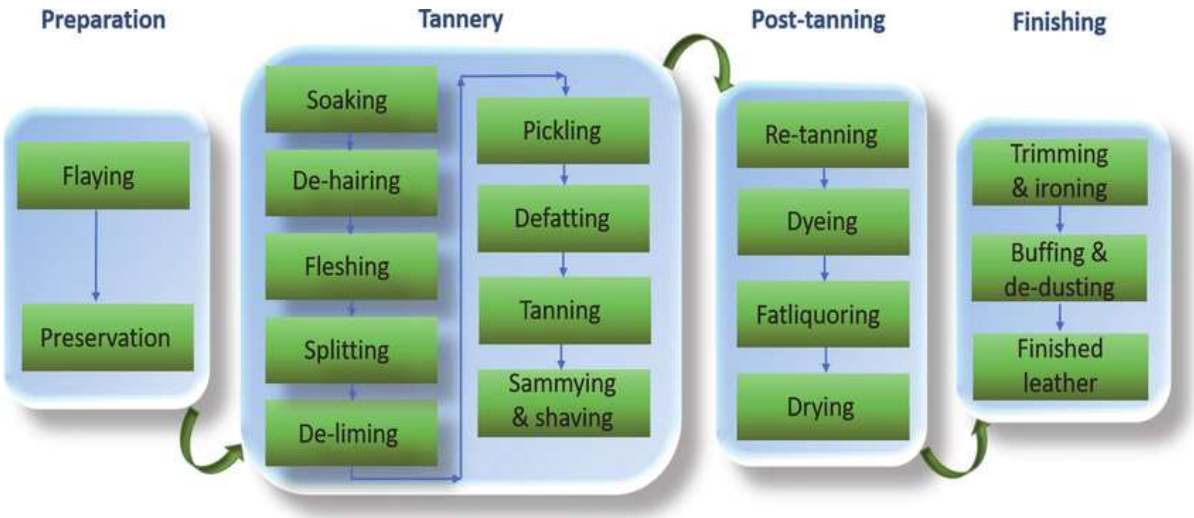

Figure 12: Production Process for Seal leather products (Shahidi & Zhong, 2005)

First of all, the seal skins are cured with salt to remove the water from the tissues and halt the development of micro-organisms, then dried. 15 days later they are examined and sorted according to various criteria (thickness, blemishes, weight, surface, etc.) before being entrusted to the tannery, which will put them through a 5-stage process to bring out all their nobility and beauty:

- Beamhouse operations

The different steps in what are known as beamhouse operations - the steps between curing and tanning - take place in a succession of enormous drums. After soaking (rehydration) and

cleaning, unhairing and fleshing, the skins undergo bating, a softening process to prepare them for tanning.

- *Tanning*

Using tannins, which are substances containing vegetable or mineral salts or a combination of them, the skins are transformed into rotproof leather (i.e. which cannot decompose), which is resistant to hot water and has a low water content.

- *Dyeing*

The skins are dyed wet in large drums. The leather is also fatliquored to give it suppleness and strength.

- *Dressing*

The dyed leather then undergoes setting-out to stretch it and drying, before being sorted for quality. It is also at this stage that leather can be buffed to obtain nubuck.

- Finishing

This stage consists of colouring the leather surface to give it its final appearance. Different methods are used, which will impact the quality of the finished product: After being colored by immersion in a dye bath, aniline leather, which has a fine natural finish, does not undergo any surface treatment.

3.6.1.2 Production process for Seal Oil production

The basic processing steps for the manufacturing of marine oils for human consumption involve cooking or rendering to release the oil followed by:

- Possible degumming,
- Alkali refining,
- Bleaching, and
- Finally, deodorization as well as possible addition of antioxidants

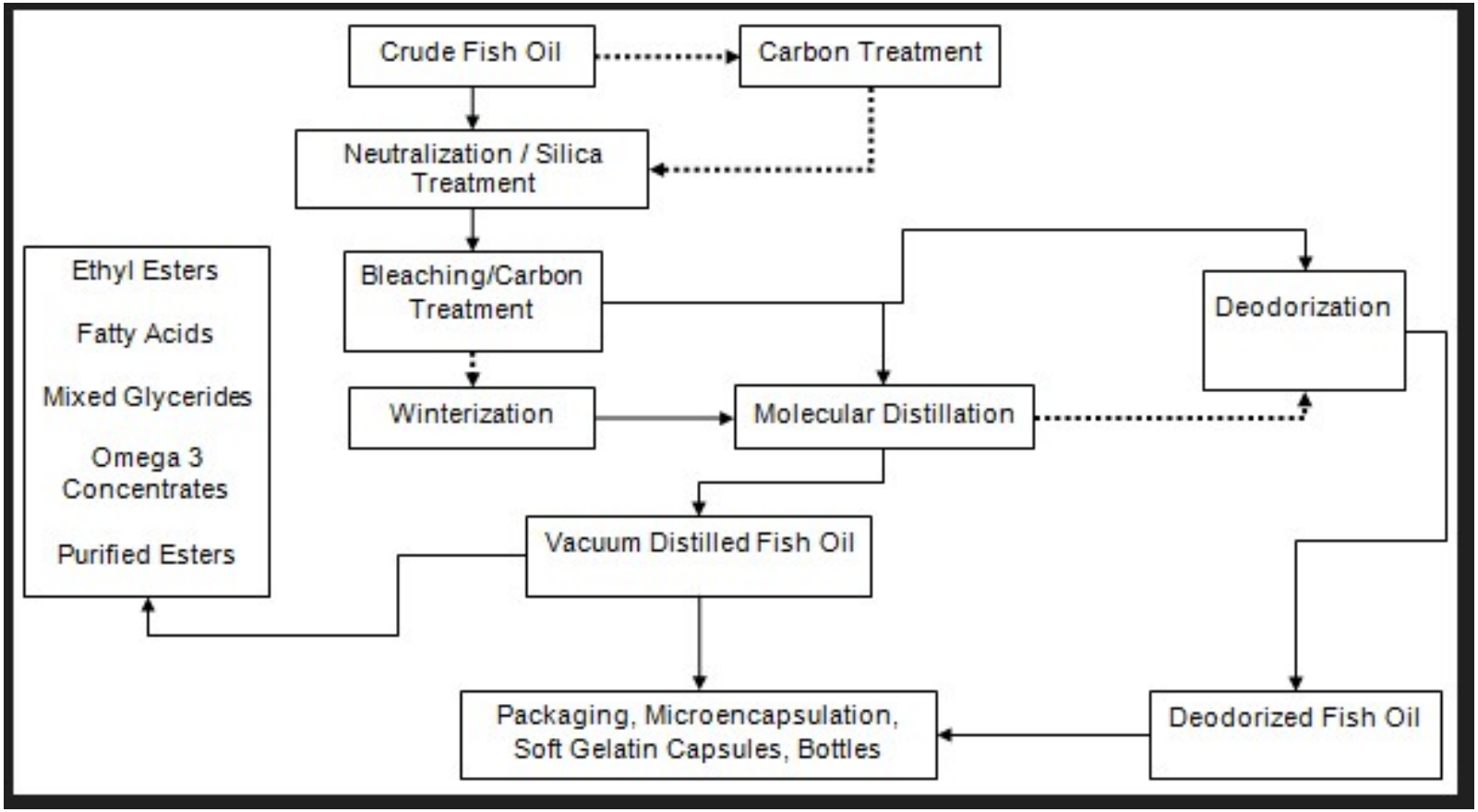

Figure 13: Production process for Seal Oil production

During these processing steps, free fatty acids, mono and diacylglycerols, phospholipids, sterols, vitamins, hydrocarbons, pigments, proteins and their degradation products, suspended mucilaginous and colloid-like matter, and oxidation products of fatty acids are removed from the oil. Processing steps of Seal oil and other marine oils are similar to those for vegetable oils; however, the quality of crude marine oils is less uniform than that for crude vegetable oils.

To obtain high quality crude marine oils, proper handling and chilling of raw material to minimize oxidative damage after landing is vital. The rendered, crude oil from blubber of marine mammals can also be treated with silica at low temperature under vacuum followed by bleaching and deodorization, as described by Mag, (Shahidi & Zhong, 2005).

According to Grompone (1992), the resulting oil, which is completely bland, is essentially free of proteinaceous materials, phosphatides and mucilage, and prooxidant metals and very low in colored compounds, peroxides, and secondary oxidation products. This method avoids the use of acids and bases that are required in conventional degumming and alkali refining of marine oils, thus eliminating the risk of contamination as well as reducing the number of processing steps. The method is also environmentally friendly because it does not require soap stock and waste water processing.

3.6.1.3 Seal Product Processing Factory Design building layout

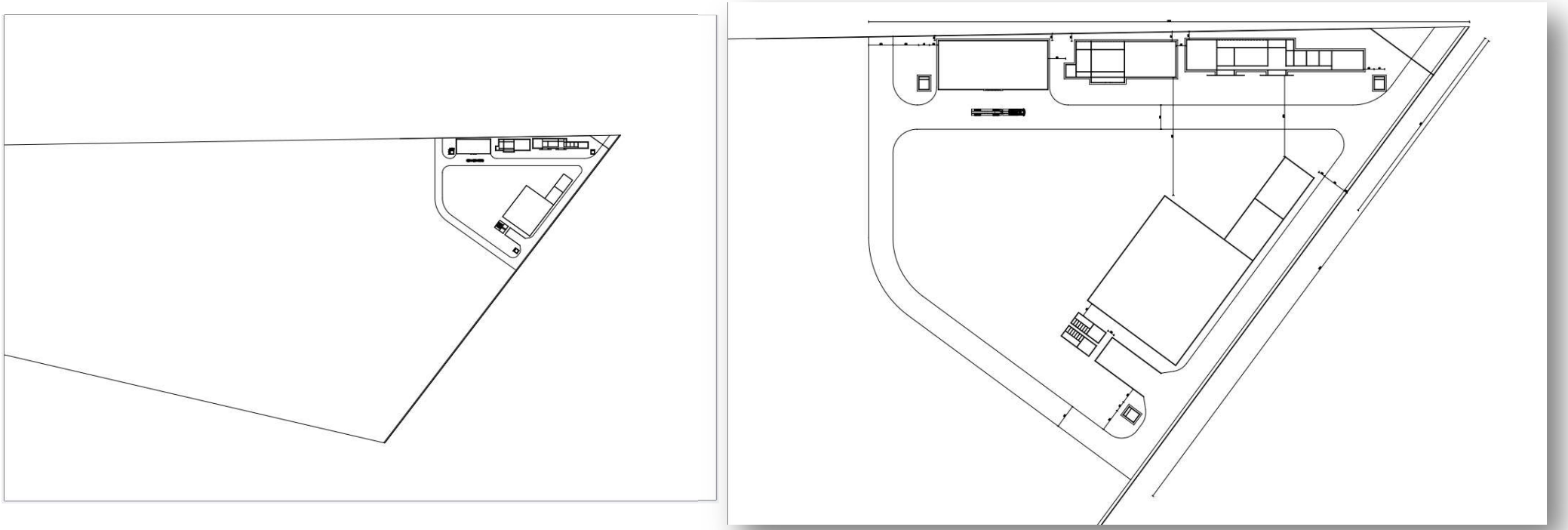

Figure 14: Seal Product Processing Factory Design building layout

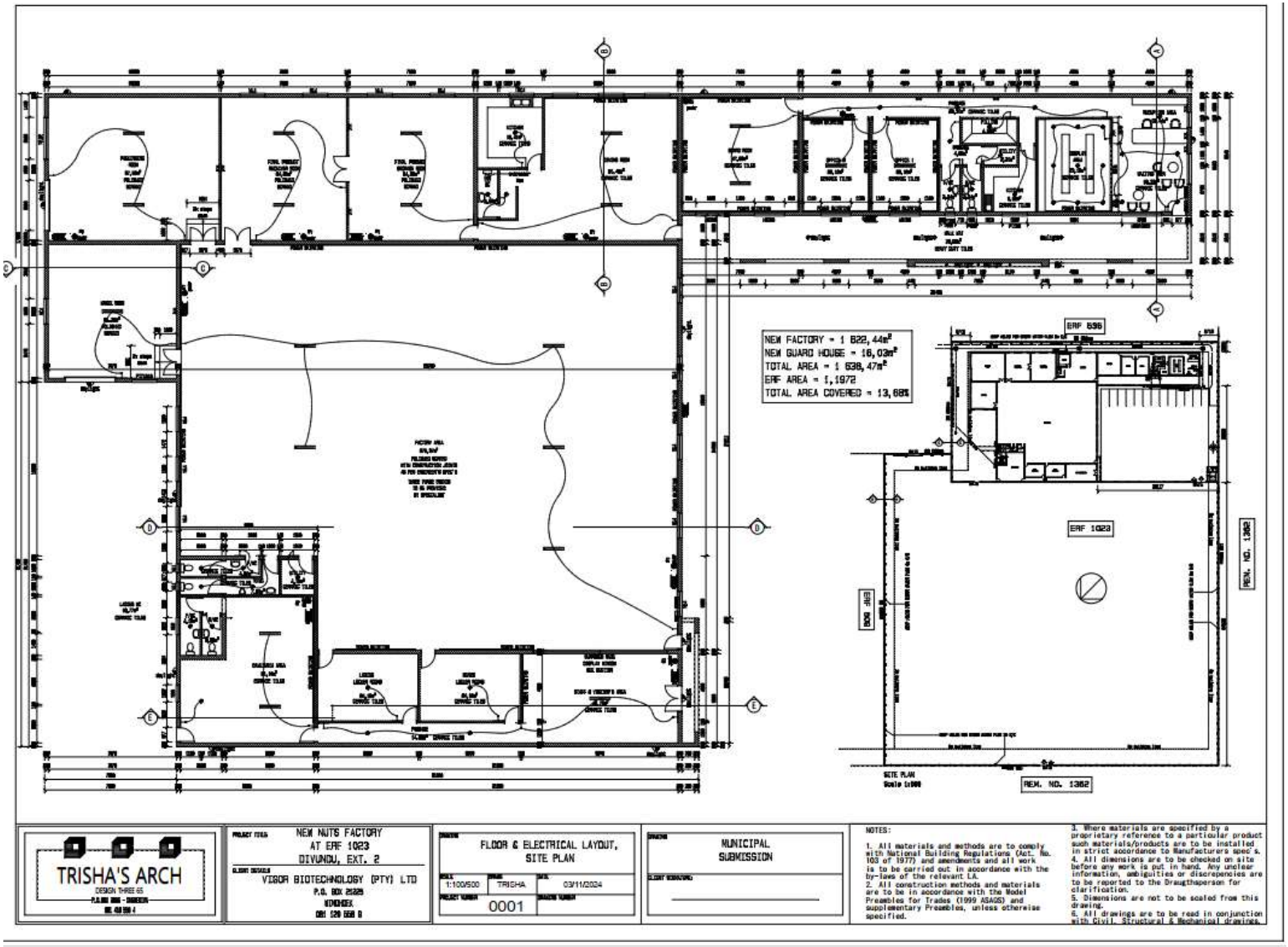

Figure 15: Structural design of Seal product processing plant

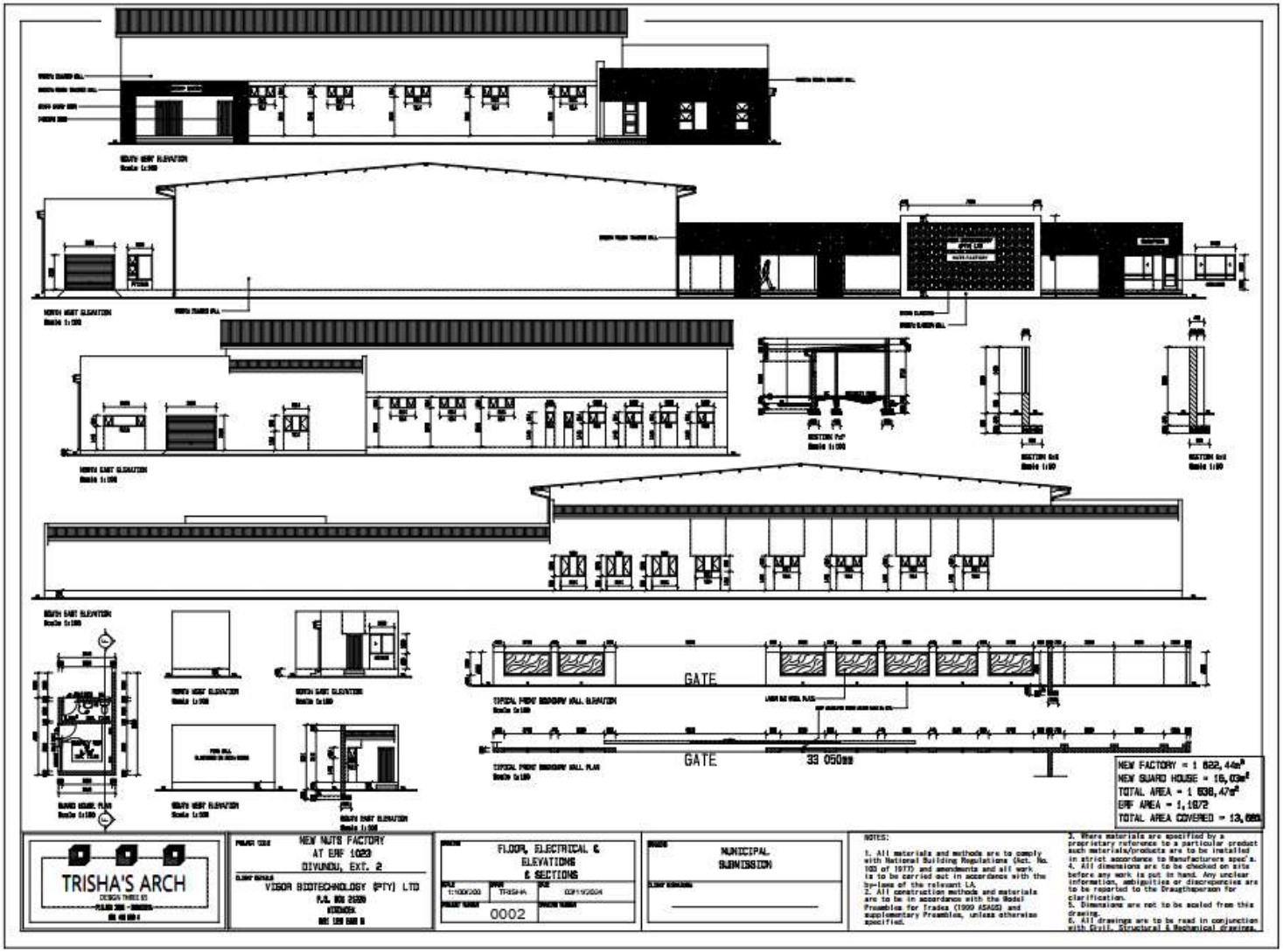

Figure 16: Building Elevation design of Seal product processing plant

4.THE ENVIRONMENT ASSESSMENT PROCESS

This chapter outlines the broad technical and public participation processes that has been followed throughout this environmental assessment process.

4.1 Technical Process During Scoping Phase of The EIA Process

The EIA is part of the scoping study of the proposed project. The findings of the EIA will also assist engineering design team in taking into consideration potential environmental impacts. During the scoping stage the technical assessment will focus much on identifying issues of concern. These issues will be taken into considerations during impact assessment process. The following has been conducted:

1. Desktop review of the proposed project and available information from the client.
2. Meeting with the client and project team to discuss project specifications.
3. A biophysical assessment of the study area.
4. Public consultation meeting is scheduled to take place on 16 April 2025.
5. Background Information Document available for the public.
6. Draft of Scoping report available for the public.

5. EIA EVALUATION METHOD

Before the project commences, an authorization is required from the Department of Environmental Affairs (DEA), Ministry of Environment and Tourism, in line with the Environmental Management Act of 2007 and the EIA Regulations No 30, 6 February 2012. Therefore, the proposed development is a listed activity and an EIA must be undertaken. The application for the Environmental Clearance Certificate (ECC) will be submitted to DEA. The following subheading describes what will be covered in the Scoping and Environmental Assessment.

The assessment criteria ensure that a comprehensive assessment of potential is undertaken in order to determine the overall impacts significance. The following criteria should be taken into consideration:

- The nature of impact i.e. positive, negative, direct, indirect;
- The extent and location of the impact;
- The duration of the impact i.e. short term, long term, intermittent or continuous;
- The magnitude/intensity of the impact occurring;
- The extent to which the impact can be reversed;
- The degree to which an impact may cause irreplaceable loss of a resource;
- The cumulative impacts;
- The mitigatory of potential impacts; and
- The significance of the impact on local, regional or global level.

Mitigation measures should subsequently be identified and recommended for all impacts to reduce the overall impact significantly to an acceptable level, where applicable. Mitigation measures should aim to address the following:

- More environmentally sound designs, concepts, layouts, technologies, etc., are investigated and implemented, if feasible;
- Environmental benefits of proposed activity are enhanced;
- Negative impacts are avoided, minimized or enhanced; and
- Residual negative impacts are within acceptable levels.

Table 2: Description of criteria used to evaluate potential impacts.

Significance Rating	**LIST OF CRITERIA USED IN ASSIGNING A SPECIFIC RATING**		
	INTENSITY	**EXTENT**	**DURATION**
High Significance	High	Regional	Medium Term
	High	National	Short Term
	High	Local	Long Term
	Medium	National	Medium Term
	Medium	Regional	Long Term
	High	Local	Medium Term
	High	Regional	Short Term

Medium Significance	Medium	National	Short Term
	Medium	Regional	Medium Term
	Medium	Local	Long Term
	Low	National	Medium Term
	Low	Regional	Long Term
Low Significance	Medium	Local	Medium Term
	Medium – High	Local	Short Term
	Medium	Regional	Short Term
	Low	National	Short Term
	Low	Regional	Medium Term
	Low	Local	Long Term
Very low Significance	Low	Local	Medium Term
	Low	Regional	Short Term
	Very low	Local	Short Term
Neutral/No impact	Zero intensity with any combination of extent and duration		

5.1 Potential Impacts during constructional stage

- Noise Pollution
- Dust
- Waste generation
- Ecological disturbance

Table 3: Potential impacts during constructional stage

Aspect	Type of Impact	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Noise	Negative	1	1	2	1	M	L
Dust	Negative	1	1	2	1	L	L
Waste	Negative	1	1	0	1	M	L
Ecology	Negative	1	1	2	1	L	L
Cumulative Impacts	Negative	1	3	4	3	L	L

Summary of all potential impacts expected during Project expansion activities: In general, all impacts assessed are expected to be low to medium and mostly short term and only applicable to the targeted study area and not affecting the surrounding. However, mitigation measure outlining options on how to reduce or lessen these potential impacts will be discussed in the Environmental Management Plan (EMP) attached.

6. PUBLIC PARTICIPATION

The principle of the Environmental Management Act of 2007 and along with the EIA Regulations of 6 February 2012, is to provide for sufficient and transparent process to share information regarding a proposed project and to allow the Interested and Affected Parties to comment and ensure that all concerns are identified and included throughout the decision-making process.

6.1 Objectives from The Public participation Process

The public participation process is designed to offer enough, accessible and fair platform to share or to include the affected and interested parties to information about the project. The process must allow those issues of concerns are benefits both parties and addressed fairly throughout the process. It also should verify that these issues have been captured. All issues should be verified by the technical investigations. Comments and issues raised must be included in the EIA report.

6.2 Announcing of The Opportunity to Participate

The opportunity for stakeholders to participate in the EIA was announced as follows:

- A3 posters were placed on noticeboard at the following places; Henties Bay Municipality, Spar Super Market Shop, Woermann brock shopping center.
- Background information document (BID) was distributed to stakeholders.
- Newspaper advertisements were place in x2 Newspaper 25 March to 04 May 2025 in New Era & Confidante Newspapers respectively.

Figure 17: Notices placed for public consultation& participation meeting (insert advert notice poster)

6.3 Stakeholder Briefing and Community Consultation

A meeting was held on the 16 April 2025 and attendance register was distributed and only eight (8) people were in attendance. No comments or issues raised at this meeting.

Figure 18: Insert picture of the public consultative meeting_07.04.2025

6.4 Raised Issues for Investigation By EIA Specialists

Stakeholders had the opportunity to raise issues either in writing, by telephone or email, during the meeting held 20 April 2025. To date, no issues have been received (No summary of issues).

6.5 Review of The Draft Scoping Report and Issues And Report

Stakeholders were given two months period to comment for their concerns to be captured in this final Scoping Report. Stakeholders had an opportunity to verify information in the first draft and raise further issues and comments on any aspects of their concerns. A period for comment lapsed without any comments from them.

Announcement for report availability

The availability of the draft report was announced by way of:

- All initial contact and at public consultative meeting with stakeholders.
- All initial calls for register as Interested and affected parties in newspaper advertisements.

Distribution of draft report

The report was distributed for comment as follows:

- Left at the project school.
- A copy was issued to the Town Planning Office, Henties Bay Municipality.

6.6 Final Scoping Report, Issues and Responses Report

The final Scoping Report was prepared at the end of the comment period end of April 2025. No comments from stakeholders were registered.

6.7 Ongoing Progress Report

As the process progresses, all stakeholders who attended the meeting were added to the distribution list and receive personalized letters. These will report on progress to date, thank those who attended the public consultation meeting and outline the next step in the process.

7. DESCRIPTION OF RECEIVING ENVIRONMENT

7.1 Climate

Henties Bay has a desert climate. There is virtually no rainfall all year long. The average annual temperature is 17.4 ^{0}C. About 0 to 40 mm of rainfall annually (*Mandelson et al, 2009*).

7.2 Geology

The Erongo Region consists of old crystalline rocks that form the basement of the Permo-Triassic Karoo Sequence and the young deposits of the Namib Desert. About 130 million years ago, several large and scattered magmatic complexes, now deeply eroded, were emplaced in central Namibia in a broad zone extending from coastal area of the Erongo Region in a northeasterly direction.

Figure 19: Available electrical power services to the project area.

7.3 Soil

According to the Ministry of Agriculture, Water and Rural Development (MAWRD), Henties bay soil is extensive physical weathering, as well as erosion because of arid desert conditions.

Mostly of the surface area is classified as highly susceptible to erosion making soil development very difficult in general. Leptosols, Acrisols, Ferrasols, Vertisols and Gypsisols form the soil structures in that region.

7.4 Hydrology

Ground water is classified by hydrogeological rock type and in Henties Bay a combination of different rock formation exists namely; hard rock terrain and aquitard or aquiclude. The many sources of water for Henties Bay community comes from the Omdel aquifer situated east of Henties Town.

7.5 Fauna and Flora

According to Elongo Chris (2019), the proposed site is within an area known to have less than 10 plant species. However other parts of Henties bay have plant species such as; Pencilbush (Arthraerualeubnitzia), dollar bush (Zygophyllumstapfii), lichens, shepherd's tree (Bosciaalbitrunca), welwitschia (Welwitschia mirabilis).Pencil bush (Arthraerualeubnitzia) is dominant in that area

Figure 20: Pencil bush (Arthraerualeubnitzia)

7.6 Land Use and Site Location

The proposed study area is situated approximately 300 m North-east of Henties Bay Town Center within the Townland. The land belongs to the client Messrs Virgo Biotechnology Pty Ltd who acquired it from the Municipality. The area is already disturbed, as there are existing developments within the project site surrounding area.

Figure 21: Existing aircraft hangers within the Henties Bay Town Land no. 133

8. SOCIO ECONOMIC ISSUES

This section outlines the general socio-economic status of the Town in relation to the proposed project. Henties Bay economy is dominated by three main activities, Tourism, Fishing and Mining. Majority of residents are in informal employment. The town has a population of 7,569 inhabitants according to 2023 census survey. They are about two schools, a State School and Private School in Henties Bay. There are small scale operational urban Agriculture, apart from poultry farming and the none operational Seal Factory product factory that closed in 2023.

9. ENVIRONMENTAL IMPACT ASSESSMENT (EMP)

The Environmental Impact Assessment Regulations require the developer to provide an Environmental and Social Management Plan. An EMP is a document where all the measures that are required for environmental protection, which will include the mitigation measures and the monitoring plan, will be found for easy reference. The aim of an environmental management

plan is to avoid, minimize, or ameliorate effects or impacts resulting from project implementation and where possible, enhance beneficial effects.

This EMP seeks to limit the interaction of disturbed with undisturbed lands at Proposed project site and through the various processes of project implementation, restore the disturbed land to a predetermined form of land-use or to a productivity level similar to that occurring prior to disturbance. The Environmental Management Plan for the management of the identified environmental impacts associated with this project consists of three main components:

- Implementing the Impact Mitigation Plan.
- Monitoring the implementation of the EMP.

9.1 Impact Mitigation Plan

The impact mitigation plan allocates the responsibilities for implementation of the proposed mitigation measures to the various stakeholders and indicates at what stage in the project they should be performed. The Plan is presented in this section and it addresses the negative impacts generated by the project and presents the associated cost estimates of mitigating the adverse impacts. The key components of the proposed impact mitigation plan are:

(i) Surface and ground water quality management
(ii) Soil erosion Control
(iii) Vegetation and Flora
(iv) Wildlife and Fauna Habitats

(i) Bush fires

(ii) Noise and vibrations

(iii) Occupational Health and safety

(iv) Land use and Soil

(v) Air Quality

(vi) Landscape, land use and Aesthetics

Socio-economic components of the mitigation plan include:

(i) Cultural and Historic Sites

(ii) Employment and conditions of service

9.2 Surface and ground water management

Surface and ground water are an important component of agricultural, ecological and human use of the land in the proposed project. The aim of the water management program is to ensure that where practical, flows into and through the project sites is maintained and that ground water sources (boreholes within the project area) are used efficiently to prevent inconsistent draw down of water during abstraction. The following will be undertaken to protect surface and ground water:

- An effective drainage system will be put in place to capture all waste water.
- Oil spillages from vehicles and machinery will be avoided on site. Compliance with the Hazardous Waste Regulations will be priority.
- A good and effective monitoring system will be put in place during operations. Regular surface and ground water samples will be collected and analysed. Bi-annual results will be submitted to the Namibian Environmental directorate.
- Ensuring that boreholes and septic tanks are at least 60 meters apart.

9.3 Soil erosion control

Virgo Biotechnology Pty Ltd Seal Oil and Seal product processing plant project area have soils with less likelihood of soil erosion. However, the nature of the soil in high rainfall or winds may be prone to erosion. The operational activities and methods to be adopted by company will ensure less risk of soil erosion and runoff water on the project site, nearby developments and settlements.

9.4 Vegetation and Flora

The proposed project area is within the urban developable area and as a result has a large portion of disturbed land that has been used for human activities, such as motorbike off-road

driving (mostly by Henties Bay residents). Most of the flora is dispersed as the area is a desert associated with dry to humid conditions and most plants do not grow in this kind of weather. A number of management initiatives shall be implemented to reduce further potential impacts and disturbance to flora and vegetation. These include clearly marking and restricting access to areas of high conservation value; concentrate the operations to already vacant land for business purposes.

9.5 Wildlife and Fauna habitats

Due to the project site locality and other anthropogenic activities on the land, the area has no large animals that will be disturbed or likely to migrate due to the planned activities to be conducted by Animal Seal Oil and Seal product processing plant. However, in the event that the small identified animals are threatened, it is most likely that the species will tend to migrate from the areas of greatest activity during site preparation and operation but will return during the night and more stable years of the operations. The selected potential impacts on fauna will be reduced by restricting disturbance and clearing of habitats to the minimum required for safe and efficient operations of the project and progressively rehabilitating disturbed areas to re-establish habitats for the animals.

9.6 Bush fires

The impact of fires is more significant in the dry season as the risk of flora and fauna disturbance and threat is high. This is so because the flora and grass are dry and of little moisture likely to provide more means of fuel for ignition. Other than ignition, and fuels, other factors such as season, wind pattern and proximity with human settlements will play an important role in open burning. Such factors will need to be ascertained as appropriate timing of burning may facilitate a good burn and at the same time minimize air pollution impact. Consideration of the regional factors will enable classification of the area in terms of air pollution risks. All workers will be warned of the dangers of deliberate ignition of fires and its impact on wildlife, crops and other natural resources.

9.7 Noise and vibrations

Operation of machinery at the project site will have little impact on the local surrounding community as the noise levels to be emitted will be within the acceptable audible levels. The settlements around the farm are at reasonable distances unlikely to receive destructive noise levels. The team will also ensure that only well serviced machineries are used to avoid generating noise levels that are above the recommended limit. Operations will be limited to day time only.

9.8 Employment and conditions of service

Virgo Biotechnology Pty Ltd Animal Seal Oil & Seal products processing plant Initiative project will employ up close to +-80 to 110 workers at full implementation of the project. In accordance with its employment policy, this will constitute thirty (30%) of women. The company will uphold the government directive under the labour laws to pay all workers the stipulated minimum wage. Further, the company will observe all labour related regulations pertaining to normal working hours and other conditions of employment. This means “The proposed factory will comprise of 30 permanent skilled staff members. On-season will comprise of 50 seasonal semi-skilled and 5 skilled workers to carry out the task of harvesting which is seasonal between July to December annually”.

9.9 Cultural and Historic Sites

The Project area have no cultural, historical or archaeological sites within that may be disturbed by the project implementation from pre-construction to decommissioning phases.

10. THE IMPLEMENTATION OF THE ENVIRONMENTAL MANAGEMENT PLAN (EMP)

Table below outlines the management of the environmental elements during the planning and operational phases. It further provides a brief summary of the management of the Project area. Contents of these tables could be incorporated into a HSEQ management system. The proponent would be responsible to assign the responsibilities and ensure that the tasks are executed.

Environmental Aspect	Objectives	Monitoring frequency	Mitigation and enhancement measures	Responsible person	Monitoring costs (N$)
PREPARATION & CONSTRUCTION PHASE					
Surface Water Quality	To protect contamination of storm water.	Seasonal	Construction of proper drains alongside access roads and drains within the project area and operation areas.	Operations Director	4,200
Ground Water Quality	To protect ground water contamination from oil spills and chemical run off.	Quarterly	Drip trays will be used when removing used oils from equipment waiting servicing.	Project Manager	3,400
			Fuel storage tanks will be placed in a banded wall and concreted surface. The bunding shall have a volume equivalent to 110% the volume of the fuel tank. A sump shall be constructed in such a way as to drain any oil that has spilled	Project Manager	
			Used oil storage facility shall be kept under lock and key, concreted and bunded	Project Manager	-
Ambient Air Quality			Drainage systems in the project site will be constructed to prevent chemical runoff during irrigation and rainy season	Project Manager	-

	Suppression of dust from construction sites and access roads	Weekly	The project area shall have a water bowser which shall be used to suppress dust on the main road and other access roads and construction sites where there is dust.	Project Manager	-
			If available molasses will be sprayed on roads and construction sites to suppress dust formation. Emissions and dust levels will be monitored by way of periodical air sampling using mobile dragger pump. Results will be submitted to DEA quarterly.	Project Manager	1,400
Soil Contamination	To protect soil from contamination from fresh and used oil spills, and fuel.	Quarterly	Refuelling & repair of construction equipment will be done in designated areas and periodic maintenance will be done on all equipment to avoid oil leaks getting into the soil	Project Manager	-
			Drip trays will be used in maintenance areas to drain used oil from equipment.	Project Manager	-
			Fresh and used oil will be stored in separate and lockable shades whose floors shall be concreted	Workshop manager	-
			A bioremediation plan shall be established for the purpose bioremediation of oil contaminated soils.	Project Manager	3,000
Soil Erosion	To protect the soil from erosion	Monthly	Storm water drains will be constructed around construction sites to collect storm water and there by	Project Manager	-

			prevent soil erosion *(However no severe storm water or rain have been experienced in this part of the region)*		
			Access roads and the plant periphery will be left with trees and this will protect soil erosion	Project Manager	-
Noise	Minimise Noise to acceptable levels	Monthly	All project equipment will be subject to a routine maintenance to ensure they are in good working order, hence minimising noise levels. Restrict operations to day time only.	Project Manager	-
			Employees shall wear ear muffs or ear plugs and other necessary Personal Protective Equipment (PPE).	Project Manager	3,000
	To protect workers from noise exceeding acceptable levels	Monthly	Periodical monitoring of noise levels shall be conducted.	Project Manager	-
			Selection of low noise level equipment when purchasing farm and workshop equipment will be first priority.	Project Manager	-
Land Use	To rehabilitate the project area and try to restore to its original state.	Annually	The mitigations here shall only come at closure. Buildings like the farm house, workers houses, fuel storage facility, used oil storage shed and the mini workshop will be demolished, area cleared and rehabilitated and other irrigation equipment removed also. Pumps shall be roved and boreholes caped. The	Operations Director	1,000

			land shall be re-vegetated and or allowed to naturally re-vegetate.		
Flora	To protect the local flora where possible.	Quarterly	The project will be implemented mostly to utilise spaces or land which was already disturbed in the surveyed project areas vicinity	Project Manager	1,800
Fauna	To protect local fauna.	Quarterly	Noticed fauna in the proposed project site will be preserved by taking it to areas that will remain undisturbed.	Project Manager	1,200
Archaeology and cultural sites	To protect cultural heritage from damage	Project Inception	Any cultural heritage site discovered during construction will be preserved and the cultural heritage commission informed accordingly.	Project Manager	1,500
Public Safety	To minimise health and safety risks.	Quarterly	Pre-employment and regular medical examinations will be carried out on all employees to ascertain their health.	Project Manager	1,450
			All plant equipment will be subject to a routine maintenance programme to ensure they are in good working order, hence minimising health and safety risks.	Project Manager	-
			All workers including contractors will be subject to wearing appropriate personal protective equipment (PPE) depending on the work type and place	Project Manager	-

			All workers to go through safety and health inductions upon employment.	Project Manager	-
	To protect members of the public from hazards associated with construction activities.		Only authorised workers will be allowed to enter construction areas. No members of the public will be allowed to enter construction sites as well as the farm premises	Project Manager	-
			"Danger" warning signs to be placed in different points along the boundary of the project area and along the access road.	Project Manager	-
			Warning signs to be written in symbols, English and Vernacular language for easy interpretation.	Project Manager	-
Landscape and Visual characteristics	To protect visual characteristics of the landscape.	Project inception	Where there shall be no roads and buildings, the visual characteristics of the landscape shall not be altered.	Project Manager	1,100
Hazardous Waste	To safely keep generated hazardous waste and dispose of appropriately	Throughout Project	Used oil and used batteries storage areas shall be constructed according to environmental guidelines. Lockable, concreted and bunded shed shall be constructed.	Project Manager	1,200
Sewerage Waste	To protect sewer waste from contaminating the	Throughout Project	A septic soak way system shall be revamped and/or constructed to treat sewer waste since Henties Bay	Project Manager	1,250

	soil and or ground water		Virgo Biotechnology Pty Ltd proposed factory & surrounding areas are not serviced by municipal infrastructure		
Solid Waste	Dispose solid waste at construction site accordingly	Throughout Project	Wheel bins and garbage boxes will be stored in designated areas and sold or given to authorised scrap metal dealers or given to the locals for domestic use.	Health officer	1,450
			Cement empty bags and containers will be re-used or returned to supplier for re-use.	Project Manager	
OPERATIONAL PHASE					
Surface and ground Water Quality	To protect contamination of surface and ground water	Quarterly	Proper maintenance of storm water drains along access roads and drains within the project area	Operations Director	
			The transport of hazardous materials to and from project site will be done in accordance with laid down procedures. Requirements will Include: documentation and inventory control through chain of custody; emergency response training for spills.	Project Manager	
			Only designated transport routes shall be used to transport chemicals such as fertiliser, fungicides, herbicides, fuel, used oil, fresh oil, lime and pesticides to and from the business.	Project Manager	

			Contracted transporters of chemicals shall be licenced with Ministry of Mines & Energy.	Project Manager	
			Contracted transporters of petroleum products shall be licenced with the Energy Regulation Board	Project Manager	
			Application of fertilisers, fungicides, pesticides and herbicides will be in accordance will the law and guidelines.	Project Manager	
Ambient Air Quality	To prevent contamination of air due to dust emissions from vehicles and trucks operating on dirt roads	Quarterly	The project area shall have a water bowser which shall be used to suppress dust on access roads and construction sites where there is dust.	Project Manager	1,250
			If available molasses will be sprayed on roads and construction sites to suppress dust formation	Project Manager	
	Low fume and gas emissions		Planted Trees or natural plants will be left along access roads and on the periphery of the proposed project site to act as a wind breaker and thereby reduce dust levels	Project Manager	
			Diesel equipment to be equipped with gas absorbers	Project Manager	
Soil	Protection of soil from contamination by hazardous waste	Quarterly	Hazardous waste shall be kept in a lockable, concreted and bunded storage facility	Project Manager	

	Protection of Soil from contamination by fertiliser, pesticides, fungicides and herbicides	Quarterly	Pesticides. Herbicides, fertiliser and fungicides shall be kept in a properly constructed area with proper ventilation, concreted floor, bunded and lockable shed	Project Manager	
			Application of these chemicals shall follow the right procedures	Project Manager	
Soil Erosion	To protect the soil from erosion	Quarterly	Storm water drains will be periodically maintained to collect storm water and there by prevent soil erosion.	Project Manager	
			Access roads and the plant periphery will be left with trees and this will protect soil erosion	Project Manager	
Noise	To minimise noise levels to acceptable levels	Quarterly	All project equipment will be subject to a routine maintenance programme to ensure they are in good working order, hence minimising noise levels.	Project Manager	1,450
	To protect workers from noise exceeding acceptable levels		Employees will wear appropriate ear protection in workplaces where noise levels exceed. The Proponent will enforce the use of PPE in the project site.	Project Manager	
Land Use	Protect land from being used in other ways	Throughout project life	The Virgo Biotechnology Pty Ltd Initiative project development will be strictly for commercial harvesting and culling of seal marine mammals and. Any other use will be prohibited.	Project Manager	

Flora	To protect the local flora where possible	Throughout project life	All the trees left after the construction phase shall not be cut for whatever reason. A procedure for cutting of trees shall be put in place. Progressive planting of trees shall be carried out and encouraged in areas where trees had been carelessly cut.	Project Manager	
	Extinction of endangered plant species.		Identified Endangered plant species shall be preserved and planted elsewhere at all costs if possible.	Project Manager	
	Protection from introduction of invasive species		No invasive or alien species shall be introduced on this farmland in accordance with the invasive species act.	Project Manager	
Fauna	To protect local fauna.	Throughout project life	Noticed fauna in the proposed project sites will be preserved relocating it to areas that will remain undisturbed	Project Manager	
Archaeology and cultural sites	To protect cultural heritage from damage	Throughout project life	Any cultural heritage site discovered during operational phase other than the existing grave site will be preserved and the cultural heritage commission informed accordingly	Project Manager	
Public Safety	To minimise health and safety risks.	Throughout project life	Pre-employment and regular medical examinations will be carried out on all farm employees	Project Manager	3,000

	To protect members of the public from hazards associated with construction activities		All plant equipment will be subject to a routine maintenance programme to ensure they are in good working order, hence minimising health and safety risks	Project Manager	
			All workers whether contractor or not will be subject to wearing appropriate personal protective equipment (PPE) depending on the work type and place	Project Manager	
			All workers to go through safety and health inductions when just employed	Project Manager	
	To protect members of the public from hazards associated with construction activities	Throughout project life	Only authorised workers will be allowed to enter construction areas. No members of the public will be allowed to enter construction sites.	Project Manager	
			"Danger" warning signage to be placed in different points along the boundary of the farm.	Project Manager	
			Warning signs to be written in symbols, English and vernacular language.	Project Manager	
Landscape and Visual characteristics	To protect visual characteristics of the landscape	Throughout project life	Where there shall be no roads and buildings, the visual characteristics of the landscape shall not be altered	Project Manager	

Hazardous Waste	To safely store and handle generated hazardous waste	Throughout project life	Used oil and batteries storage areas shall be maintained according to environmental guidelines. Lockable, concreted and bunded shed shall be used.	Project Manager	
Sewerage & effluent Waste	To protect sewer waste from contaminating the soil and/ or ground water	Throughout project life	A septic soak way system already exists on Seal Factory business (a sister company) to the proposed Virgo Biotechnology Pty Ltd initiative. Thus, no construction of other septic tank will be required on the new development.	Project Manager	
Solid Waste	Disposal of solid waste	Throughout project life	Biomass from the plants will be stored and energy generation options evaluated	Project Manager	
			Domestic solid waste will be disposed of at the Henties Bay designated Dumping site in accordance with the waste management regulations	Project Manager	
DECOMMISSIONING AND CLOSURE PHASE					
Ambient Air Quality	Contamination of ambient air with dust	Quarterly	Progressive and natural re-vegetation shall be done and this will protect land from winds and that result into generating of dust.	Project Manager	
Soil Erosion	To protect the soil from erosion	Quarterly	Storm water drains will be periodically maintained to collect storm water and there by prevent soil erosion	Project Manager	

			Access roads and the plant periphery will be left with trees and this will protect soil erosion	Project Manager	
Land Use	Change of land use	Bi-annual	Demolition of all surface infrastructures, grading and re-profiling of the surface and re-vegetation will be done. If possible, land use will change to the original one.	Project Manager	
Public Safety	Danger to the community from farm equipment	Monthly	All equipment removed and infrastructure will be demolished. Areas requiring rehabilitation rehabilitated. Bore holes shall be caped.	Project Manager	3,000
Landscape and Visual characteristics	Change to landscape and visual characteristics	Quarterly	Demolition of all surface infrastructures, grading and re-profiling of the surface and re-vegetation will change the landscape and visual characteristics	Project Manager	
Solid Waste	Generation of Domestic Waste	Quarterly	Domestic solid waste will be disposed of at the Henties Bay disposal sites according to the waste management regulations.	Project Manager	
Sewerage Waste	To protect sewer waste from contaminating the soil and or ground water	Quarterly	A septic tank-soak way system shall be used to treat sewer waste	Project Manager	

11. RECOMMENDATION

Since the proposed area is within the local municipal townland area and the area is already disturbed, all potential impacts that were identified during the assessment process were minor and short only at constructional phase. These impacts can be minimized and managed successfully through the implementation of the Management Plan that is specific to the project. It recommended that environmental performance through aspect monitoring be implemented regularly to ensure compliance measure as per the set Environmental Management Plan.

All options and benefits considered points that the Municipality of Henties Bay and the resident will benefit greatly in terms of revenue from levies paid by the Virgo Biotechnology Pty Ltd company, employment for the locals and education offered to learners. This in a long term will address the issue of inadequate socio-economic livelihood growth and infrastructural development facilities in Henties Bay and Erongo Region.

.....
NYEPEPZ CONSULTANCY CC
Environmental and Management Consultant

12. REFERENCE

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- National Planning Commission (2003) Population and Income and Housing Census. Central Bureau of Statistics, Windhoek
- Shahidi, F., & Zhong, Y. (2005). Marine mammal oils. Bailey's industrial oil and fat products, 259-78.

Appendices

1. EIA practitioner company profile
2. Advertisement notices
3. Invitation letter to a public meeting
4. Stakeholder attendance register
5. Attendance register
6. MC & Council Minutes & Ministerial approval
7. Public consultation minutes