ENVIRONMENTAL MANAGEMENT PLAN

FOR THE

CONTINUED OPERATION OF THE EXISTING SEAFLOWER FISH PROCESSING FACILITY

Consultant:

RJ DYNAMIC INVESTMENT CC

Proponent:

SEA FLOWER

DOCUMENT INFORMATION	
PROJECT TITLE	UPDATING OF THE ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR THE OPERATION OF SEAFLOWER FACTORY AND THE RENEWAL OF THE ENVIRONMENTAL CLEARANCE CERTIFCATE
CLIENT	Seaflower Whitefish Corporation Ltd
LOCATION	Lüderitz, Portion J, Industrial Road
DATE	April 2026
AUTHOR (s)	Rauna Nghifikwa

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List of abbreviations

CAPA – Corrective and Preventive Action

CCP – Critical Control Point

EA – Environmental Assessment

EIA – Environmental Impact Assessment

EMA – Environmental Management Act

EMP – Environmental Management Plan

EMS – Environmental Management System

GMP – General Manufacturing Practices

HACCP – Hazard Analysis Critical Control Point

HSE – Health, Safety & Environment

IEM – Integrated Environmental Management

MSDS – Material Safety Data Sheet

QA – Quality Assurance

QC – Quality Control

QM – Quality Manager

SHEQ – Safety, Health, Environment & Quality

SOPs – Standard Operating Procedures

TSDS – Technical Safety Data Sheet

1. Introduction

1.1. Background

Seaflower Whitefish Corporation LTD is a fishing enterprise based in Namibia, specifically in Lüderitz, where the company has a processing plant located at Portion J, Industrial Road. Seaflower Whitefish Corporation LTD is a subsidiary of Namibia's marine fisheries industry, which has played a crucial role in contributing to economic growth, employment opportunities, and exports. The firm's primary business is the handling, processing, and storing of frozen fish and fishery products. Its operations are under the jurisdiction of relevant environmental laws and regulations, including food safety regulations and health laws.

The company engages in receiving raw fish, processing fish products by cleaning, filleting, grading, and packaging; cold storage of processed products; and distribution. The activities contribute significantly to the value chain in the fisheries industry but may pose certain environmental impacts, including water pollution through wastewater, solid waste production, energy consumption, and emissions. Therefore, environmental management practices play an important role in ensuring regulatory compliance and sustainable development.

In recognition of these potential environmental risks, Seaflower Whitefish Corporation LTD has commissioned the development and implementation of an operational Environmental Management Plan (EMP) for its existing processing facility. This EMP has been developed and is managed through the company's Quality Department, which is integrated with Health, Safety, and Environmental (HSE) management systems. This integrated approach ensures that environmental considerations are embedded within daily operational practices and decision-making processes.

The EMP serves as a structured, site-specific management tool designed to guide environmentally responsible operations throughout the facility's lifecycle. It outlines the procedures, mitigation measures, and monitoring requirements necessary to prevent, minimize, or manage adverse environmental impacts associated with the company's activities. Furthermore, the EMP establishes clear roles and responsibilities for employees, contractors, subcontractors, and consultants, ensuring that all parties involved in the operations understand the potential environmental risks and are equipped to implement appropriate risk management measures.

The EMP assures that all activities are done in line with approved design, regulatory guidelines, and good practices in the industry. The EMP acts as a platform for continuous improvement of

environmental performance through the monitoring and evaluation of its environmental impact. Therefore, this EMP acts as evidence of Seaflower Whitefish Corporation LTD's dedication to sustainable resource utilization and environmental protection.

1.2. Legal and Regulatory Context

The operation is a listed activity in terms of Section 27 of the Environmental Management Act, No. 7 of 2007 (EMA), which requires that such activities undergo an Environmental Impact Assessment (EIA) process and obtain an Environmental Clearance Certificate (ECC) prior to development and operation.

Although the facility was previously issued with an ECC and subsequently developed, the existing ECC has expired on 07/03/2026 and is attached as Annex A. In accordance with the EMA and the Environmental Impact Assessment Regulations of 2012, ECC must remain valid for the continuation of listed activities. As a result, the renewal of the ECC is required to ensure that the operation of the facility remains compliant with Namibia's environmental legislation and regulatory expectations.

The ECC renewal is undertaken in terms of:

Section 32 of the EMA, which governs the validity and renewal of environmental clearance certificates; and Section 6 of the Environmental Impact Assessment Regulations of 2012, which outlines procedural requirements for listed activities.

1.3. Appointment of the Environmental Assessment Practitioner

RJ Dynamics Investment cc has been appointed by Seaflower Whitefish Corporation Ltd to audit (see attached audit report, Annex C) and update the Environmental Management Plant and to facilitate the application for renewal of the Environmental Clearance Certificate.

RJ Dynamics Investment cc is responsible for ensuring that the process involved in the renewal of the ECC is conducted in a transparent, objective, and legally compliant manner, including identification of potential environmental risks, and the development of appropriate mitigation and management measures. This Environmental Management Plan forms a key supporting document to the ECC renewal application.

1.4. Objectives of an Environmental Management Plan

The first and foremost purpose of Environmental Management Plan (EMP) within Seaflower, like in any responsible entity, is to facilitate sustainable management of the environment and ensure prudent utilization of natural resources. The EMP acts as a comprehensive guide to environmental impact identification, assessment, management, and monitoring that arise from the operations of the firm. Additionally, it helps control operational activities with a potential to adversely affect the environment and ensures adherence to relevant environmental regulations and standards.

Specifically, the objectives of the EMP in this case include the following:

- To ensure that all the commitment taken in minimizing and managing possible environmental impact is properly adhered to.
- To identify all environmental issues identified and develop proper protection and mitigation mechanisms for all environmental issues identified.
- To provide proper guidelines for all employees of the Seaflower so as to ensure that everyone understands what is expected of them.
- To undertake a number of mitigation actions in an attempt to minimize any possible environmental impact to insignificant levels.
- To develop ways of improving and optimizing any positive environmental impact resulting from operations.
- To set up proper channels of communicating about environmental issues such as complaints and stakeholder expectations.
- To establish a proper process for auditing, reviewing and monitoring the whole process of environmental management.
- The entire process of conducting activities in the firm should be done while following the rules of proper environmental management and sustainability practices.
- Provide measures to address environmental impacts due to the firm's activities.
- Comply with all the health, safety, and environmental suggestions in order to safeguard not only the environment but also the workers.
- Set measures for ensuring adherence to the EMP including regular assessment and correction of any lapses noted.
- Provision of time frame for each of the suggested mitigations and management strategies should be provided.

Overall, this EMP focuses on environmental responsibility, compliance, and continuous improvement of environmental performance by the Seaflower firm.

1.5. Scope of an Environmental Management Plan

The scope of an Environmental Management Plan focuses on the management of the environment sustainably by protecting and conserving ecological habitats and resources. It lays down a systematic approach for managing and mitigating environmental impacts that may be caused by a particular project or operation.

This plan will be scoped in accordance with the phases of a project such as planning, implementation, operations, and closure. The scope will include environmental management actions that need to be carried out to ensure that the activities within the project are undertaken in a sustainable way.

Moreover, the EMP illustrates the organization's dedication to environmental sustainability through the integration of environmental factors into its daily activities and management decisions. The plan also provides clarity on the roles and responsibilities assigned to various individuals to ensure proper implementation of environmental controls and good practices.

The coverage of the EMP further includes processes that allow for improvement through environmental audits, inspections, review, and follow-up activities. Such activities are fundamental in evaluating whether the set measures are effective and, if not, correcting any areas that may be falling out of compliance. The EMP is a crucial check system in the entire EMS process in relation to ensuring the realization of all environmental objectives, among other things.

2. Management commitment

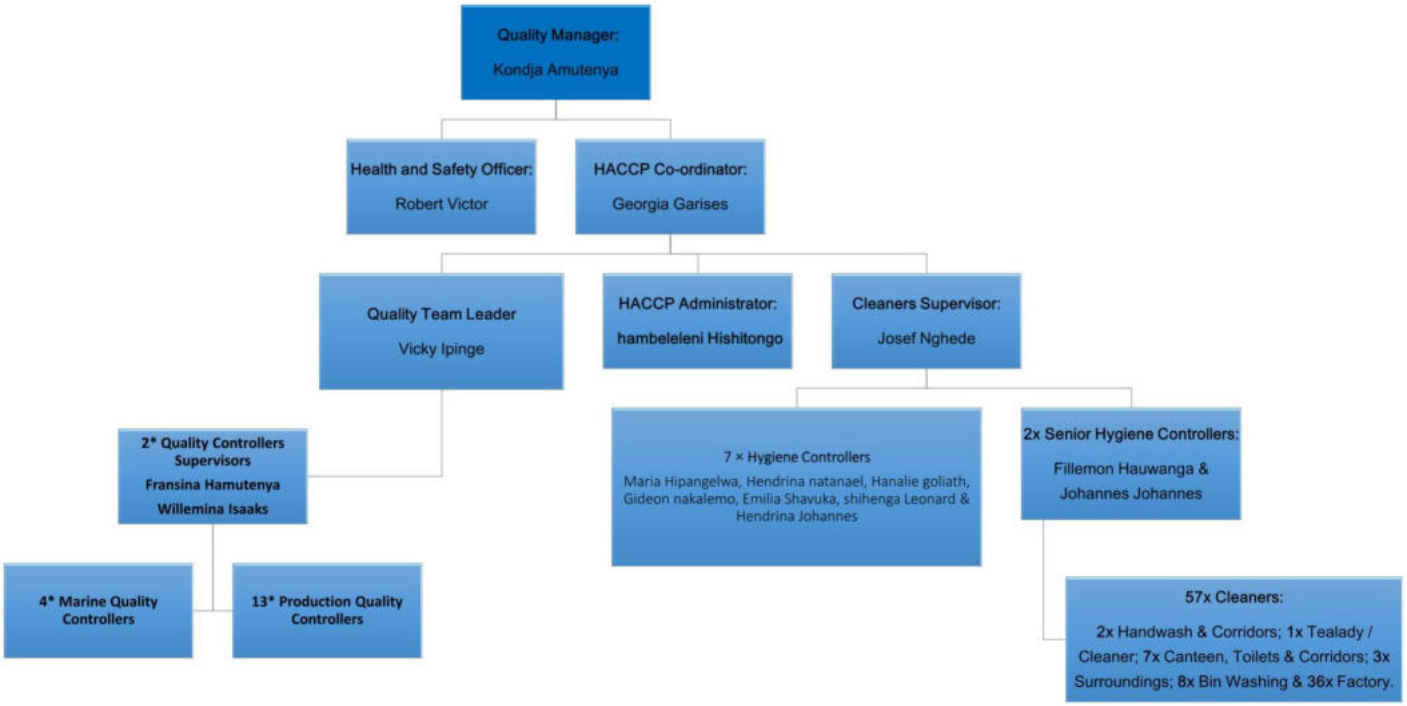


Figure 2.1: Sealower Quality Department Organogram

The Seaflower company shows high levels of dedication to environmental management by setting up a department called the SHEQ (Safety, Health, Environment and Quality) which oversees all the environmental issues of the company. Not only does the presence of such a department indicate environmental dedication, but also the provision of sufficient resources in terms of qualified personnel and training for their activities.

Environmental management within the company starts from the assignment of proper roles and responsibilities for managing environmental matters in a transparent and accountable way to properly qualified employees. The roles and responsibilities have been assigned in a well-organized manner. Each employee assigned for environmental matters has his or her specific job to do, ranging from ensuring that the company follows the environmental laws, developing and executing EMPs to conducting internal audits.

2.1. Quality Manager

The Quality Manager shall act as the Environmental Representative for Seaflower and will be in charge of ensuring the effective implementation, evaluation, and improvement of the Environmental Management Plan (EMP). The duties and responsibilities consist of the following:

Environmental Strategic Decision Making

- Make well-informed decisions on environmental management techniques and processes according to company policies, laws, and procedures.
- Advise on environmental risk management.

Review and Approve EMP

- Revise, review, and approve the updates of the Environmental Management Plan (EMP) to make sure it is up-to-date, relevant, and in line with regulations.

Leadership & Resource Management

- Get buy-in from the company's top management on environmental sustainability and the implementation of the EMP.
- Encourage and facilitate the allocation of appropriate resources necessary for effective and successful implementation of the EMP.

Incorporation into the SHEQ System

- Ensure that all environmental considerations have been identified, assessed, and incorporated into the organization's SHEQ management system.
- Help foster integration between the environmental goals and objectives of the organization and its broader organizational goals.

Environmental Monitoring, Audits, & Compliance Verification

- Perform and monitor environmental systems review, internal audit, and site inspection.
- Ensure that all environmental monitoring activities are effectively performed and adequately documented.

Environmental Initiatives and Awareness

- Plan and supervise the implementation of various environmental initiatives like waste management initiatives, cleanup activities, and other sustainability efforts.
- Work toward increasing environmental awareness within the organization and fostering a sense of responsibility among the staff members.

Incident Management and Continuous Improvement

- Help investigate any environmental incidents that may occur.
- Make sure corrective and preventive action plans are carried out to avoid similar situations from arising in the future.
- Push for continuous improvement in environmental performance.

External Environmental Audits and Stakeholders

- Plan and coordinate external environmental audits and inspections of the organization.
- Communicate with all stakeholders involved in matters concerning the environment.

Reporting and Documentation

- Maintain proper documentation regarding the environmental performance of the organization.
- Submit periodic reports to the top management about the implementation of EMP and environmental performance metrics.

2.2. HACCP Coordinator

The HACCP Coordinator refer to individuals appointed to manage, organize, and control all the environmental and food safety management issues associated with Seaflower. This position plays an essential role in ensuring adherence to the provisions of the EMP, statutory regulations, and internal regulations.

- Effectively implement, maintain, and enhance the EMP within all operational areas.
- Monitor all environmental aspects and impacts, and ensure that measures to mitigate them are in place, monitored, and analyzed for effectiveness.
- Organize and facilitate environmental induction programs and training for staff members, contractors, and visitors to raise their awareness of and adherence to environmental issues.

- Control and update all documentation related to the environmental management system, such as procedures, records, registers, and reporting.
- Plan, conduct, and coordinate all internal system reviews and environmental audits to determine the organization's compliance with the EMP requirements and identify any deficiencies.
- Conduct environmental investigations concerning incidents, deviations, and non-compliance, and see to it that the root cause is determined, corrective measures are applied, and results are documented.
- Assess the efficiency of the EMP with regards to its performance, and provide recommendations for improvement where appropriate.
- Assist contractors/sub-contractors in environmental management practices and ensure that they follow the guidelines in the EMP.
- Ensure that environmental monitoring systems (waste management, emissions, effluent management, etc.) have been properly put into action and compared to predetermined goals and targets.
- Engage the management and other stakeholders regarding the environmental performance of the company and provide feedback concerning the same.
- Establish an environment-friendly approach and mindset inside the organization.

2.3. Health and Safety Officer

- Develop, establish, and control the HSMS according to laws and regulations.
- Implement full adherence to health and safety laws, food safety standards, and policies set forth by the company.
- Undertake regular inspections in the processing areas, cold stores, and throughout the handling process to determine any possible risks.
- Establish safe operating procedures (SOPs) for all processes including operation of machines, use of chemicals, and waste management.
- Maintain full adherence to PPE policies as well as availability of equipment.
- Conduct investigations on any accident, near miss or incident and determine their root cause.
- Keep records of injury incidents, incidents, health and safety audits, and inspections for reporting and compliance purposes.

- Arrange and organize health and safety training programs, including induction training, refresher training, and toolbox talks.
- Foster a strong health and safety culture through health and safety campaigns and encourage employee involvement in health and safety initiatives.
- Communicate hazard information by labeling chemicals used and making Safety Data Sheets available.
- Manage health risks in the form of cold exposure, noise hazards, sharps, and other biohazards.
- Plan and prepare emergency action plans, including fire drills, evacuation plans, and preparation for first aid services.
- Ensure access to first aid, firefighting equipment, and emergency exits at all times.
- Communicate with regulatory bodies and auditors and support inspection activities conducted on-site.
- Help in arranging health, safety, and environmental audits and close them in a timely manner.
- Organize the activities involved in contractor safety management by ensuring compliance with site health and safety requirements by contractors.
- Manage hygiene and sanitation by coordinating with quality assurance in order to promote a healthy work environment.

2.4. Quality Team Leader

- Manage and lead the QA/QC department for adherence to company policy, HACCP principles, and food safety requirements
- Supervise the establishment and maintenance of food safety management systems (such as HACCP/ISO 22000/industry equivalent)
- Carry out daily quality checks on raw materials, processing, packaging, and completed seafood items
- Implement proper sanitation and Good Manufacturing Practice (GMP) throughout production facilities
- Identify critical control points (CCP) and confirm measures taken to correct any deviations
- Perform internal audits and support external audits conducted by governmental organizations and certifications bodies

- Handle customer complaints, deviations from product requirements, and product nonconformities, ensuring CAPA is applied effectively
- Head product quality checks including sensory evaluation, weighing, temperature, and label controls.
- Preparation and collation of quality reports on a daily, weekly, and monthly basis for the review by management
- Coordinating with production, maintenance, and logistics personnel regarding any quality issues that may affect the efficiency of the production process
- Ensuring adherence to local and international regulations concerning the export of seafood products as well as the requirements of customers
- Monitoring hygiene conditions in the processing environment (water quality, ice quality, and sanitation systems)

2.5. Contractors and sub-contractors

It is mandatory on the contractors' side that all operators are properly briefed and made to understand the requirements of the Environmental Management Plan (EMP). Failure to abide by the guidelines laid down in the EMP shall serve as sufficient reason for disciplinary or preventive actions on the part of the Quality Manager (QM). In addition to that, the QM also retains the authority to ask for the removal of the equipment which causes an environment hazard, such as leaking of oil or diesel. This action does not take away the right of the client to initiate any legal proceedings against the contractor.

The QM has the right to suspend the operations of the whole project or its parts when the contractor or their sub-contractors, suppliers, or any other relevant party fails to follow EMP or the construction methods that have been approved. Such a suspension remains in place till either the equipment or activity has been improved accordingly. There will be no extension of the time allowed for the completion of the project because of such delays.

As per the environmental responsibilities of the Contractor as set out in the contract documentation, the responsibility of all individuals involved will include:

- Adherence to the EMP through the provision of sufficient manpower and support infrastructure.

- Method statements will have to be submitted to the QM for approval before beginning any activity and ensure continued adherence to the EMP as well as the approved method statements for environmental practices.
- Rectification of any identified environmental concerns in line with the company's operational needs.

3. Legal and other requirements

The Namibian Constitution has some basic principles of state policy that serve as guidelines for the creation and enforcement of national legislations and regulations. While such principles cannot be enforced by the Namibian courts, they form the constitutional base for environmental management and sustainable development in Namibia since they are aimed at fostering the proper exploitation of natural resources and ensuring their sustainability and integrity for future generations.

Such constitutional principles have been taken into account while elaborating and implementing the Environmental Management Plan (EMP) and, therefore, a set of different national legislations, policies, and guidelines applicable to the EMP has been developed. The main of them includes the Environmental Management Act No. 7 of 2007 which lays down the general legislative principles of the environmental impact assessment, prevention of adverse environmental impact, and sustainable environmental management in Namibia. It is accompanied by the Environmental Impact Assessment (EIA) Regulations that stipulate the list of activities and provisions for issuance of environmental clearance certificates.

Further related laws considered during the process include those on water resources management, pollution control, waste management, and biodiversity conservation laws, as all these laws create binding obligations on protecting the environment from degradation. Guidelines and policies within specific sectors and at the national level were also considered to ensure that best environmental practices were employed in the entire process of implementing the project.

All these laws and guidelines combined help form the basis of ensuring that the EMP fits within national environmental governance objectives as well as supporting sustainable development.

3.1. The constitution of Namibia 1990

In Namibia, the Constitution is the highest source of law that governs the management of environmental affairs in the nation. The Constitution stipulates the responsibility of the State to

ensure that natural resources are utilized in a sustainable manner for the benefit of both the current and future generations. In this respect, Articles 91(c) and 95(i) emphasize the need for protection and enhancement of the environment by providing for the duty of the State to promote environmental well-being.

The function provided in Article 91(c) with regards to the role of the Ombudsman ensures that administrative measures taken do not lead to environmental degradation. In addition, Article 95(i) under the Principles of State Policy mandates the government to formulate and pursue a policy on maintaining ecosystem sustainability. Even though the principles themselves are not judicially enforceable, they provide an important guideline for the conduct of all government organs in their development policies.

The above constitutional provisions as a whole, imply that the Government of Namibia has made commitments in relation to sustainable development. They include the following environmental commitments:

Prevention from the overexploitation of biological natural resources:

- The Constitution implies the prevention of overexploitation of biological natural resources by the state.

Prevention from over-exploitation of non-renewable resources:

- This implies the limitation of the over-exploitation of mineral resources and fossil fuel among others through the provision of controlled mining activities and environmental rehabilitation.

Ecosystem functionality:

- The government is required to ensure the maintenance of the functional capacity of ecosystems by protecting the ecological functions like nutrient cycling, water regulation and habitat stability.

Biodiversity conservation:

- The constitution promotes biodiversity conservation in that it seeks to protect species, habitat, and genetic diversity, which are important aspects of biological diversity.

3.2. Environmental Management Act No. 7 of 2007 and the Environmental Management Act Regulations of 2012

The Environmental Management Act (EMA) No. 7 of 2007, in conjunction with the Environmental Management Act Regulations of 2012, constitutes the key legislative instruments that govern environmental management and impacts in Namibia. The overall objective of the act is to facilitate the sustainable management of the environment and the prudent exploitation of natural resources through the provision of guiding principles in environmental decision-making. It also stipulates procedures for assessing, regulating, and controlling any operations that could have considerable impacts on the environment, along with other ancillary issues.

As far as compliance is concerned, it is expected of the company to comply with all the conditions set out under the Environmental Management Act and Regulations. Under this Act, it is stated that any listed activities that have the possibility of causing significant effects to the environment must go through an Environmental Impact Assessment as per Section 27 of the Act. In light of this condition, the activities of Seaflower fall into the category of listed activities and consequently necessitate the possession of a valid Environmental Clearance Certificate before starting or continuing the same.

There are several guiding principles for the Environmental Management Act. Some of them include:

- Decision-making based on precautionary and informed approach: The approach is meant to ensure that there is an adequate consideration of the effects of planned activities on the environment at the early stages of decision-making.
- Opportunities for public participation and openness: The principle ensures that there are ample opportunities provided to those who are interested in participating in the process of environmental assessments.
- Incorporation of the results of the environmental assessments in decision-making: Ensures that the environmental assessment recommendations are appropriately taken into account prior to the authorization and approval of any activity which has significant effects on the environment.

The above-mentioned principles are some of the many which guide the act in ensuring that development takes place in an environmentally friendly manner.

3.3. The Water Act (No. 54 of 1956)

Water Act (Act No. 54 of 1956) represents one of the main statutes which regulate the issue of the protection, utilization, and management of water resources. Mainly, the objectives of this Act include providing provisions in regards to the sustainable utilization and conservation of water for various purposes such as domestic, agricultural, urban and industrial. It provides statutory powers in relation to the regulation of activities which may lead to water pollution and contamination of natural hydrological cycles.

One of the most important provisions of this statute relates to water pollution prohibition. Specifically, any person or organization discharging effluents or wastes in water resources must make sure that their actions do not lead to pollution and contamination of the waters. This obligation is referred to as "duty of care" in accordance with Section 3(k).

The Act also provides regulations for the control and protection of groundwater resources. In this regard, Section 66(1) clearly refers to measures taken for the protection of the groundwater against the process of depletion, contamination, or other kinds of pollution and deterioration.

Furthermore, the Act regulates matters relating to surface and groundwater resources. This includes the broad issue of the conservation and regulation of water resources in various domains such as household needs, agricultural practices, construction projects, industries, and any other usage of water. Moreover, the Act also allows regulating the utilization of seawater, in certain cases, along with the activities carried out on the water bodies in certain geographical locations.

3.4. Water Resource Management Act No. 11 of 2013

Water Resource Management Act No. 11 of 2013 is the legislation which regulates the management, protection, development, utilization, and conservation of water resources in Namibia. It sets up a number of instruments through which water resources can be regulated in an environmentally sustainable manner, and also addresses both existing and potential water demands.

It stipulates measures for regulating, allocating and monitoring the use of water resources for the purposes of achieving equitable access and efficient utilization of the water resources. Also, it contains provisions on the licensing of activities related to abstraction and discharge of water in order to achieve the purpose of sustainable water usage.

Furthermore, the legislation includes requirements for the regulation of water services which involve ensuring the provision of safe water services. Institutional frameworks are put in place by the legislation to ensure efficient governance of water resources.

3.5. Environmental Assessment Policy of Namibia (1995)

Namibia Environmental Assessment (EA) Policy (1995) was formulated with the intention of mainstreaming environmental considerations in development planning and decision making in Namibia. The EA Policy obligates that the environmental impacts arising from proposed development policies, programs, and projects are assessed and addressed prior to their implementation to guarantee that environmental impacts are avoided or reduced while maximizing positive impacts in order to achieve sustainable development.

A key feature of the EA Policy is the broad definition of the concept "environment" especially within the framework of IEM and Environmental Assessment. In addition to the physical components including air, water, soils, flora, and fauna, the environment covers the social, economic, cultural, historical, and political aspects among others.

The policy further stipulates that all listed policies, programmes, and projects, whether initiated by government, parastatals, or the private sector, must be subjected to established Environmental Assessment procedures. This requirement ensures consistency in evaluating potential impacts and promotes accountability in development planning across all sectors.

In addition to procedural requirements, the EA Policy emphasizes sustainability principles that guide decision-making. These principles include the precautionary approach, the polluter-pays principle, and the need for equitable resource use and intergenerational equity. In practice, these principles are particularly important in addressing issues such as waste management and pollution control, where proactive planning and mitigation measures are necessary to prevent environmental degradation and protect public health.

3.6. Atmospheric Pollution Prevention Ordinance of Namibia No. 11 of 1976

The Atmospheric Pollution Prevention Ordinance No. 11 of 1976 provides the legal framework for controlling and regulating air pollution arising from industrial and other scheduled processes within Namibia. The Ordinance is primarily aimed at preventing or minimizing the release of harmful, noxious, or offensive gases into the atmosphere in order to protect human health, the environment, and overall air quality.

A key provision of the Ordinance is that no person may operate a “scheduled process” without first obtaining a valid registration certificate issued by the competent authority. The registration certificate serves as an authorization mechanism to ensure that facilities engaging in activities with potential atmospheric emissions are properly assessed and regulated prior to operation.

The issuance of a registration certificate is subject to the demonstration that the operator is applying the “best practical means” available for the prevention or reduction of atmospheric emissions. This principle requires operators to implement feasible and effective pollution control technologies, operational practices, and mitigation measures that are reasonably attainable under the prevailing technical and economic conditions. The intention is to reduce emissions of harmful or offensive gases at source, thereby limiting their dispersion into the surrounding environment.

3.7. Hazardous Substance Ordinance 14 of 1974

The Hazardous Substances Ordinance No. 14 of 1974 is the legal document that provides the legal basis of how hazardous substances are managed and regulated within Namibia. The Ordinance covers the entire process of handling of the substances, which includes the manufacturing, importing, exporting, selling, transporting, storing, using, and disposing of hazardous substances. The ordinance also regulates the dumping and discharging of hazardous substances into the environment to minimize the risks associated with their uncontrolled releases into the environment.

One of the purposes of the Ordinance is to protect human lives and human health by reducing the exposure to any material or substance that may cause harm or injury, diseases, or even death to individuals. The Ordinance provides a classification system of hazardous substances, allowing the regulatory bodies to classify hazardous substances according to the level of hazard or toxicity of the materials.

Additionally, the Ordinance grants powers to regulatory agencies to implement their regulations by issuing permits, conducting inspections, and imposing limits on the use of hazardous substances that are extremely dangerous. It obligates manufacturers, suppliers, and consumers of hazardous substances to ensure that such substances are labeled correctly, handled carefully, and stored safely as per safety guidelines. The Ordinance assists in safeguarding the environment from pollution by prohibiting the dumping or leakage of hazardous substances into

the soil, water, or atmosphere. Thus, it contributes immensely to integrated environmental management since it ensures that hazardous substances are managed responsibly.

3.8. Public and Environmental Health Act No. 1 of 2015

Public and Environmental Health Act No. 1 of 2015 outlines an elaborate legal regime that governs the safeguarding, improvement, and sustenance of public and environmental health within the borders of Namibia. The Act ensures that there is a systematic and standardized regulatory regime for dealing with issues pertaining to public health and its associated incidental concerns.

The Act aims at improving and promoting health management practices that are geared towards prevention and response through clear guidelines. It promotes a pro-health governance strategy by looking into both the current and future health determinants within the community.

Some of the primary aims of the Act include:

Improving public health and welfare:

- The purpose of the Act is to improve the general level of health of people through creating a healthier environment and practicing health promotion.

Prevention of injuries and diseases:

- Measures have been put in place under the Act to prevent the spread of diseases and also to minimize injuries and disabilities by way of regulation and early intervention.

Protection of individuals and communities from public health threats:

- The Act seeks to identify and mitigate environmental or health threats, which could be in the form of pollution, poor water quality, and bad sanitary conditions among others.

In summary, the Act forms a critical component of the public health regulatory framework in Namibia since it integrates environmental health issues in development activities.

4. Organizational/operational activities

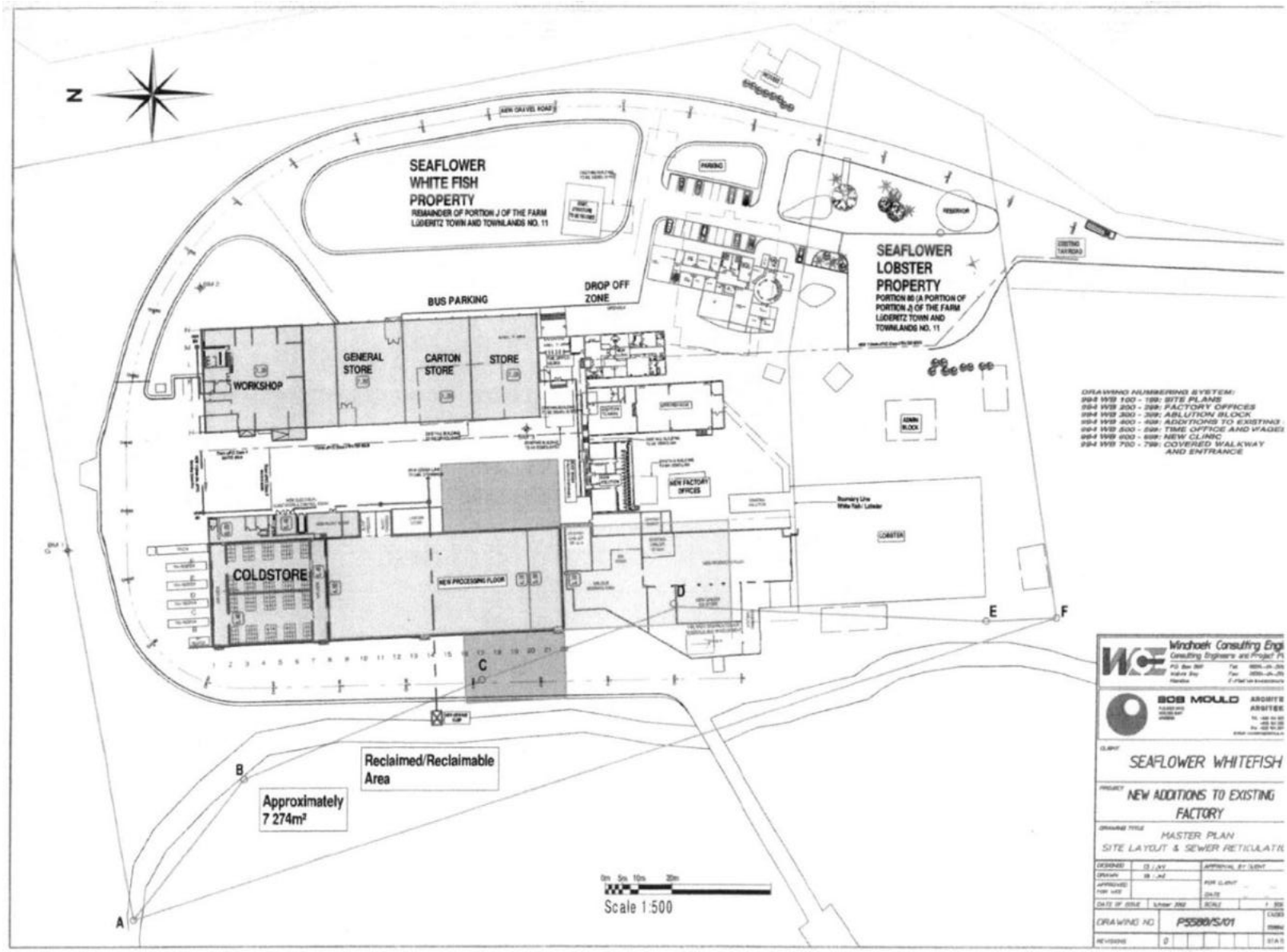


Figure 4.1: Factory Layout

The Seaflower Fish Processing Facility has been in continuous operation for approximately 26 years at its current location, demonstrating long-term operational stability and established processing systems. The facility is designed to support a range of interrelated activities required for efficient fish processing, product handling, storage, and employee welfare.

The plant infrastructure consists of several functional units, each serving a specific operational purpose. These include a workshop for maintenance and repairs, chiller rooms and a cold store for temperature-controlled storage of raw materials and finished products, bin storage areas for handling and temporary storage of fish and waste, and a general store for equipment and consumables. The production area forms the core of processing activities, while administrative offices support management and coordination functions. In addition, employee welfare is supported through on-site facilities such as a clinic and a mess area.

4.1. 4.1. Fish processing activities

The primary operational activities at the facility revolve around fish processing and associated support functions. These include:

- Processing of fish products, from receiving raw materials to final packaging and storage.
- Routine maintenance and repair of processing equipment and facility infrastructure to ensure continuous and efficient operations.

Fish processing operations are systematically structured and guided by detailed product flow diagrams, which outline each stage of the process to ensure consistency, quality control, and compliance with regulatory standards.

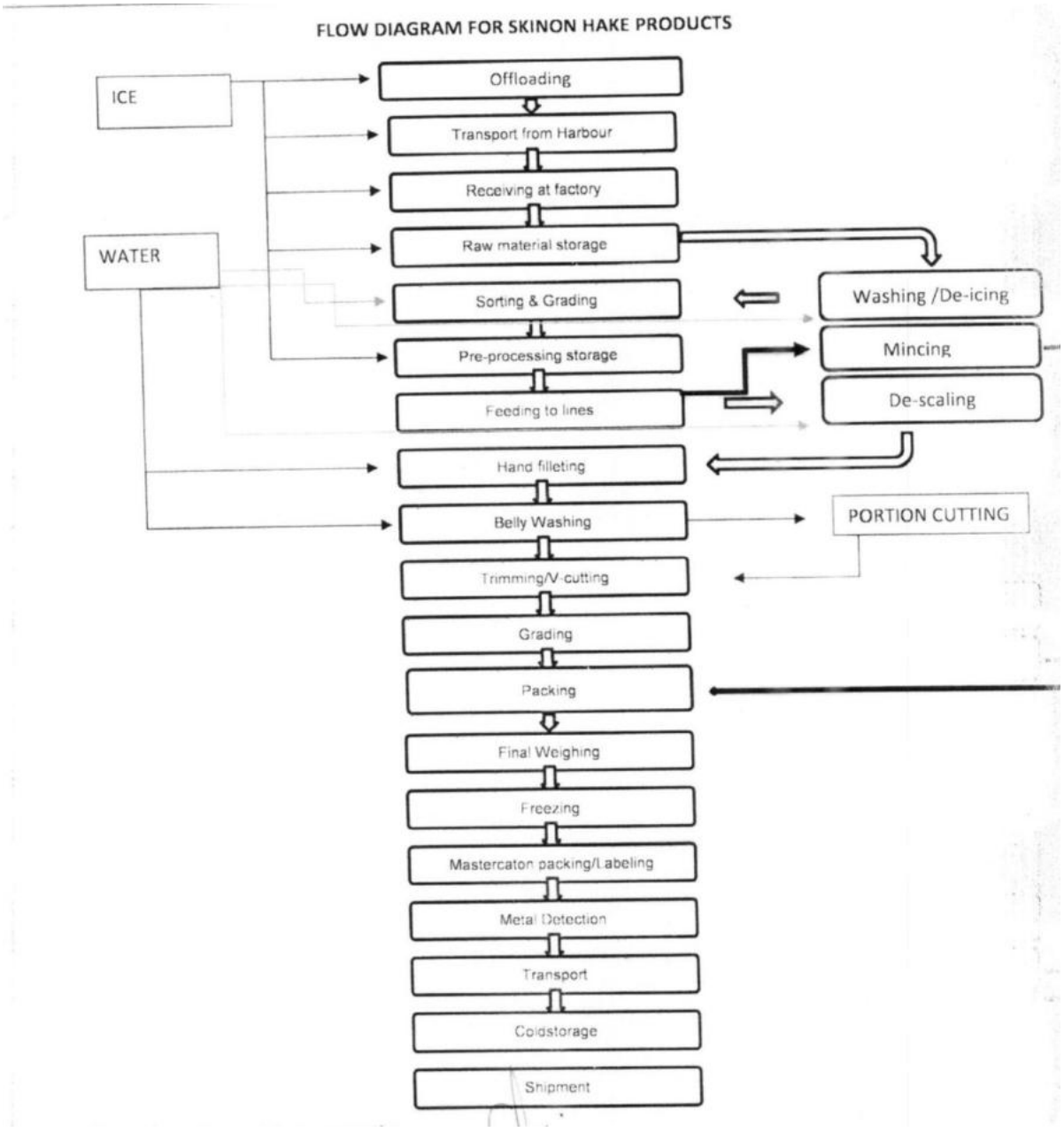
All operational activities with potential environmental impacts are identified, assessed, and managed through established systems such as the Hazard Analysis and Critical Control Points (HACCP) framework and this Environmental Management Plan (EMP). These systems ensure that risks related to waste generation, resource use, emissions, and contamination are minimized and controlled.

Furthermore, environmental awareness among employees is promoted through structured induction and regular refresher training programs. These trainings emphasize the identification and management of environmental aspects associated with daily operations.

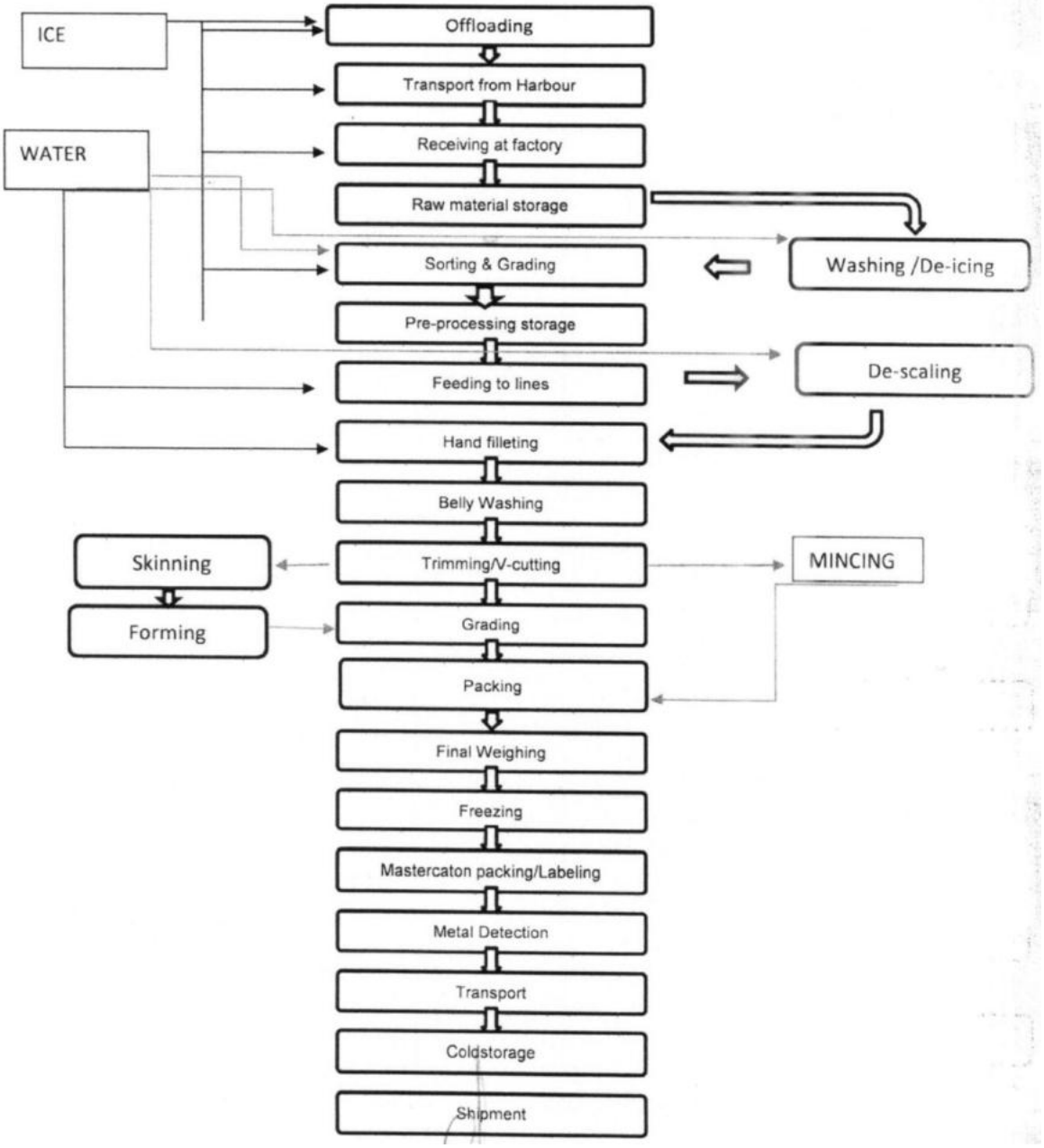
The facility operates under a comprehensive Safety, Health, Environment, and Quality (SHEQ) policy, which provides overarching guidance on responsible operational practices. The policy

outlines the organization's commitment to environmental protection, compliance with legal requirements, and continual improvement. It also establishes clear environmental objectives and targets, ensuring that all activities with significant environmental aspects are effectively managed and aligned with sustainable operational practices.

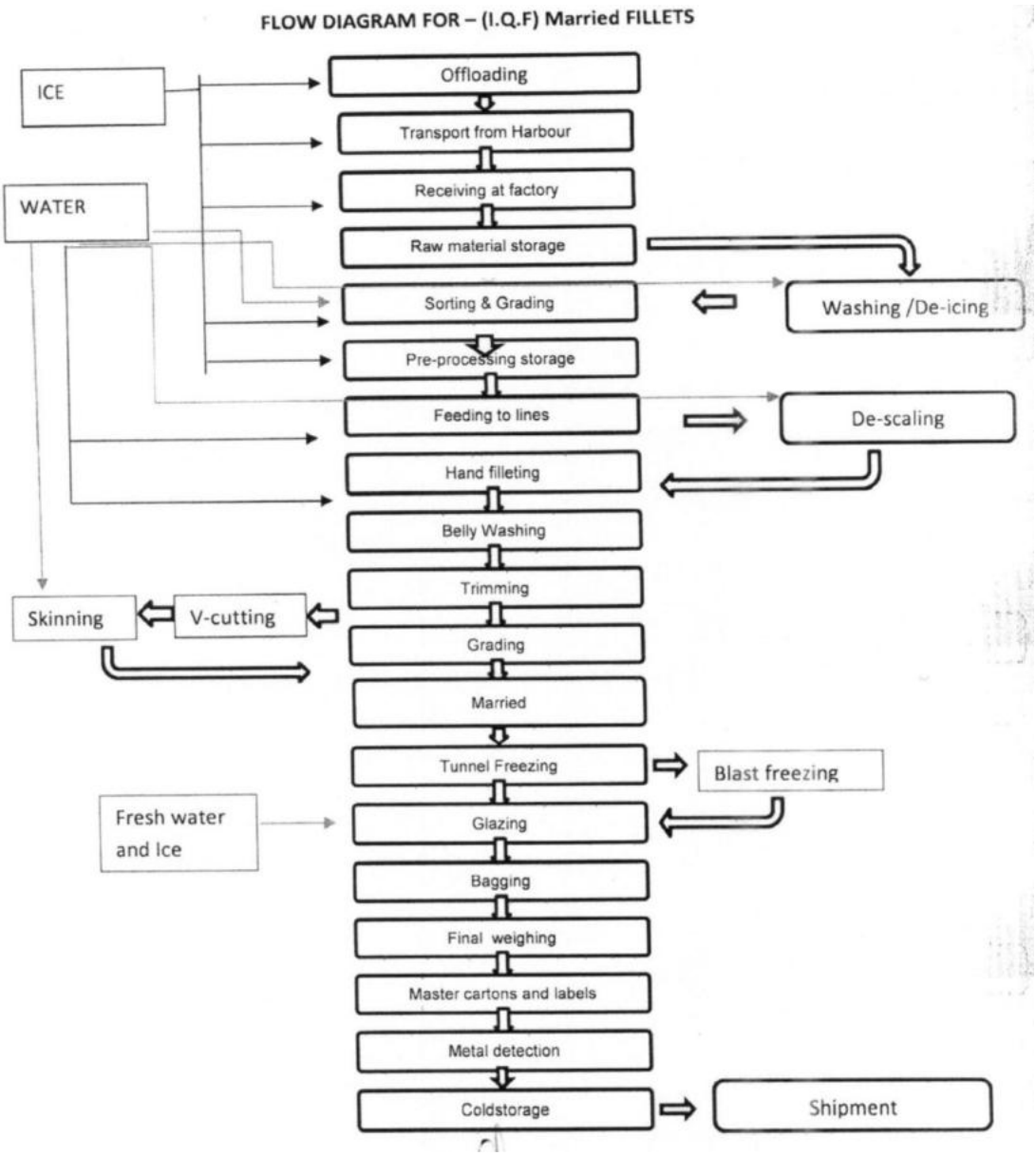
4.2. 4.1.1. Product flow diagrams



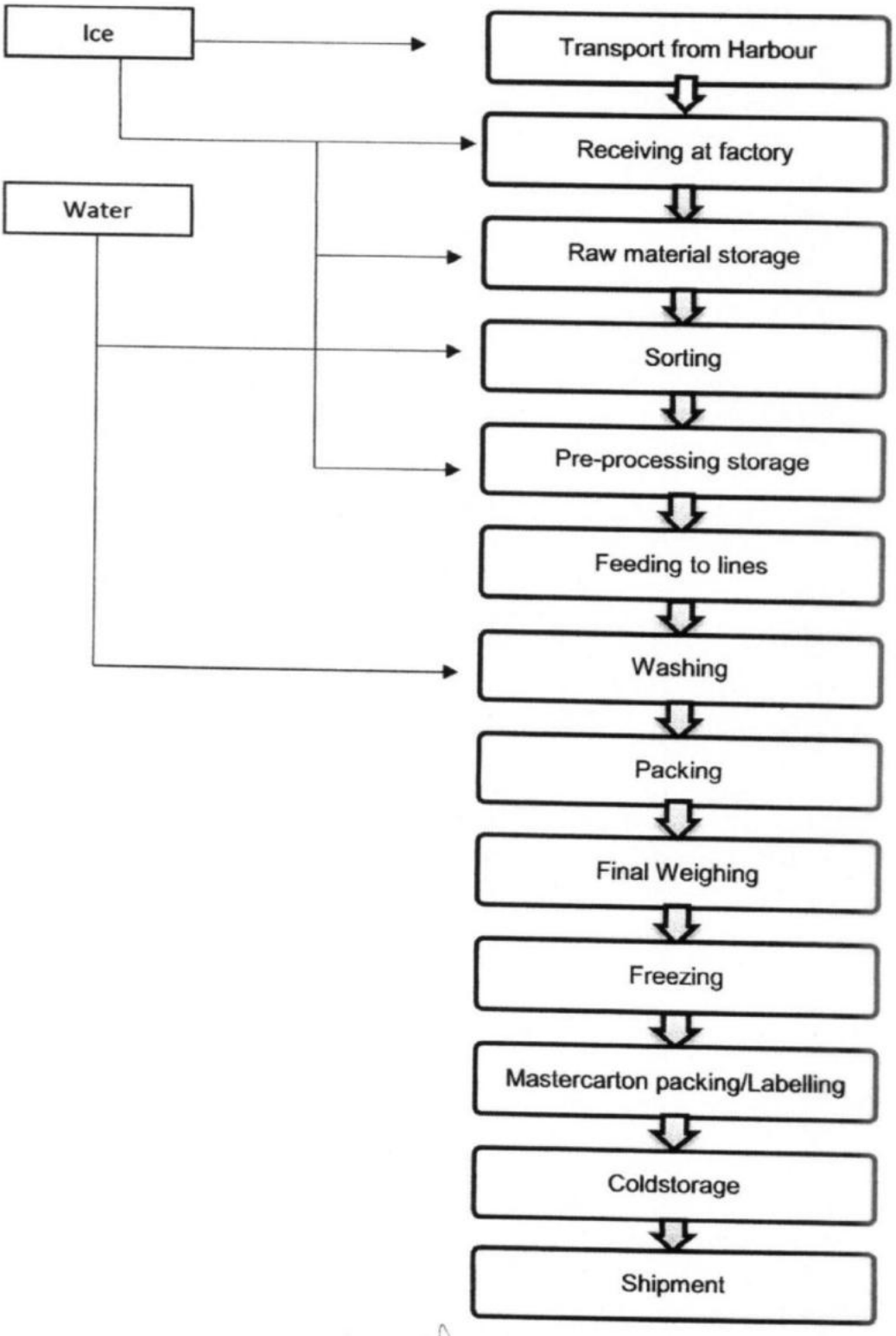
FLOW DIAGRAM FOR SKINLESS HAKE PRODUCTS



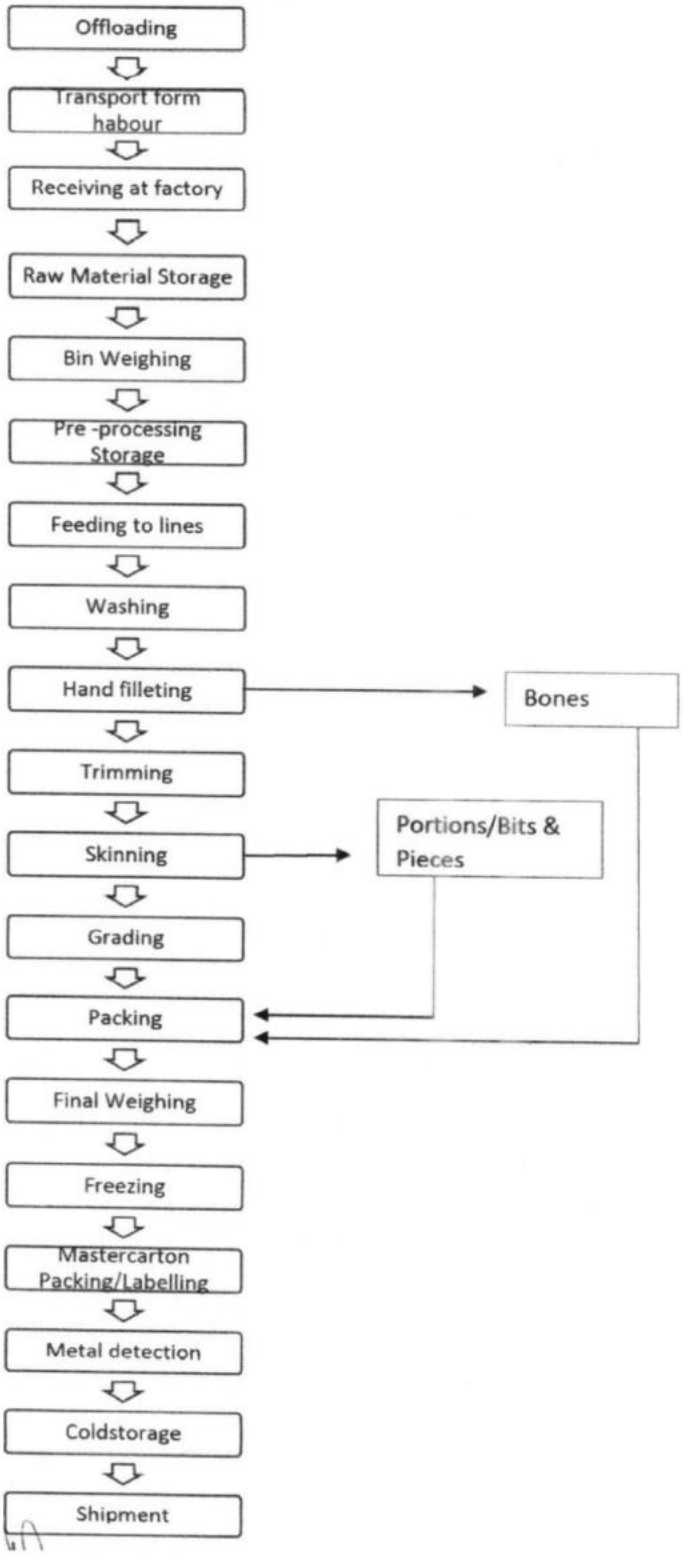
FLOW DIAGRAM FOR – (I.Q.F) Married FILLETS



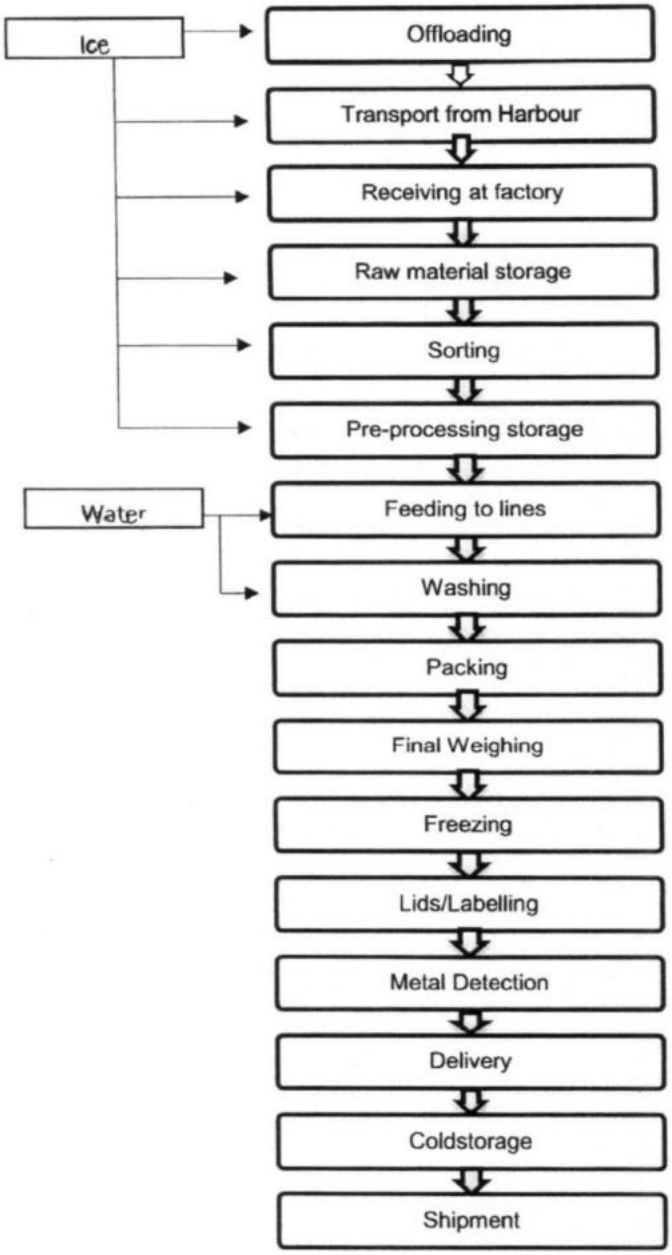
FLOW DIAGRAM – SKINON H&G HAKE



FLOW DIAGRAM SKINLESS KINGKLIP AND ASSOCIATED PRODUCTS



FLOW DIAGRAM – SOLE



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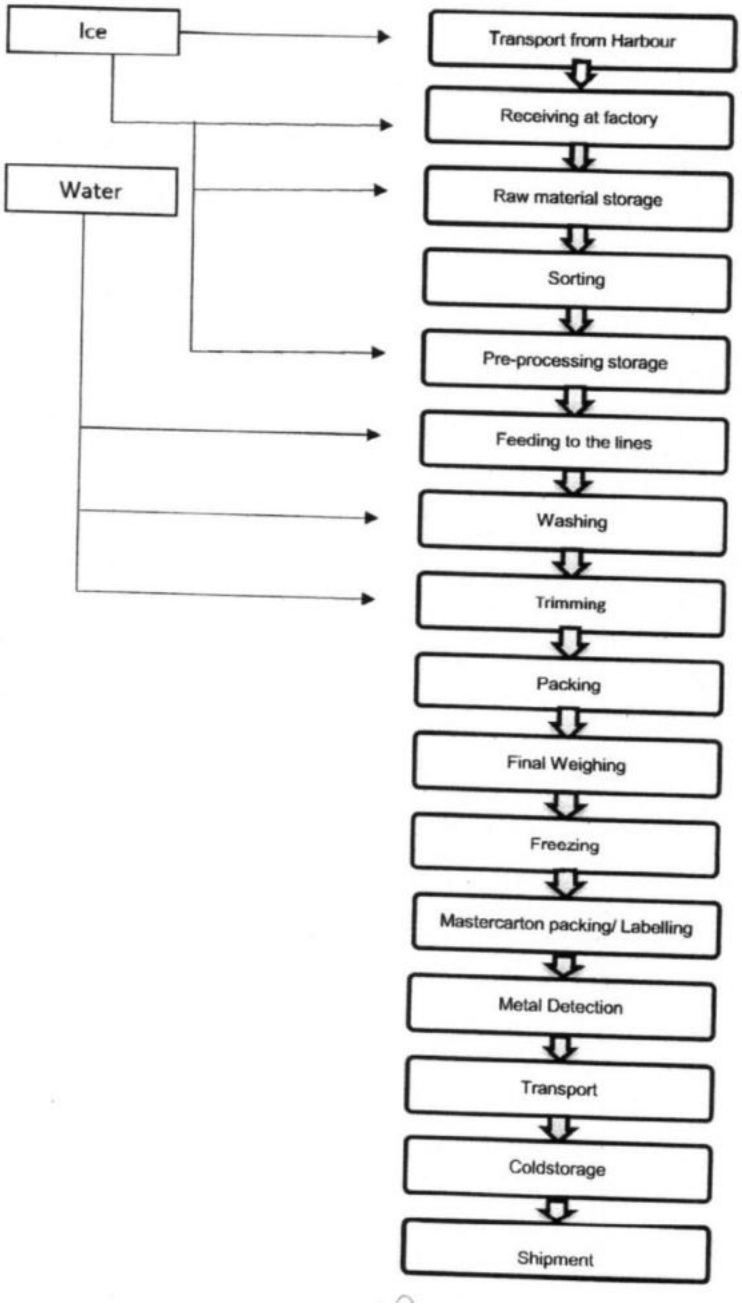

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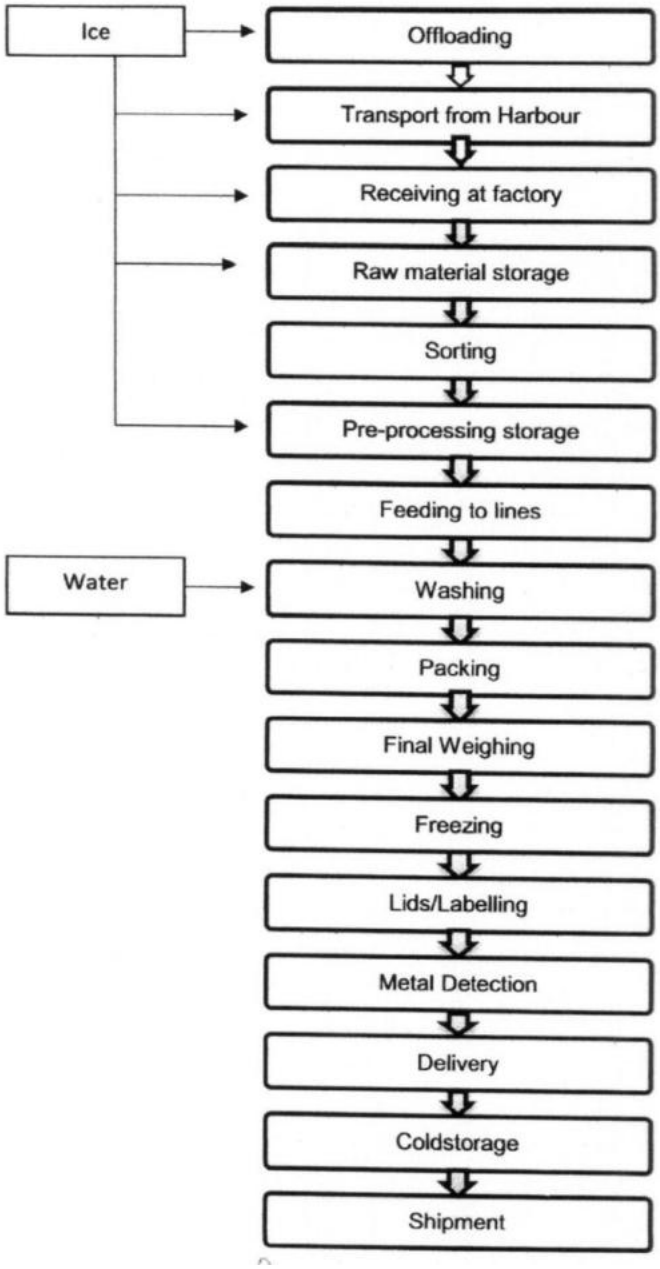

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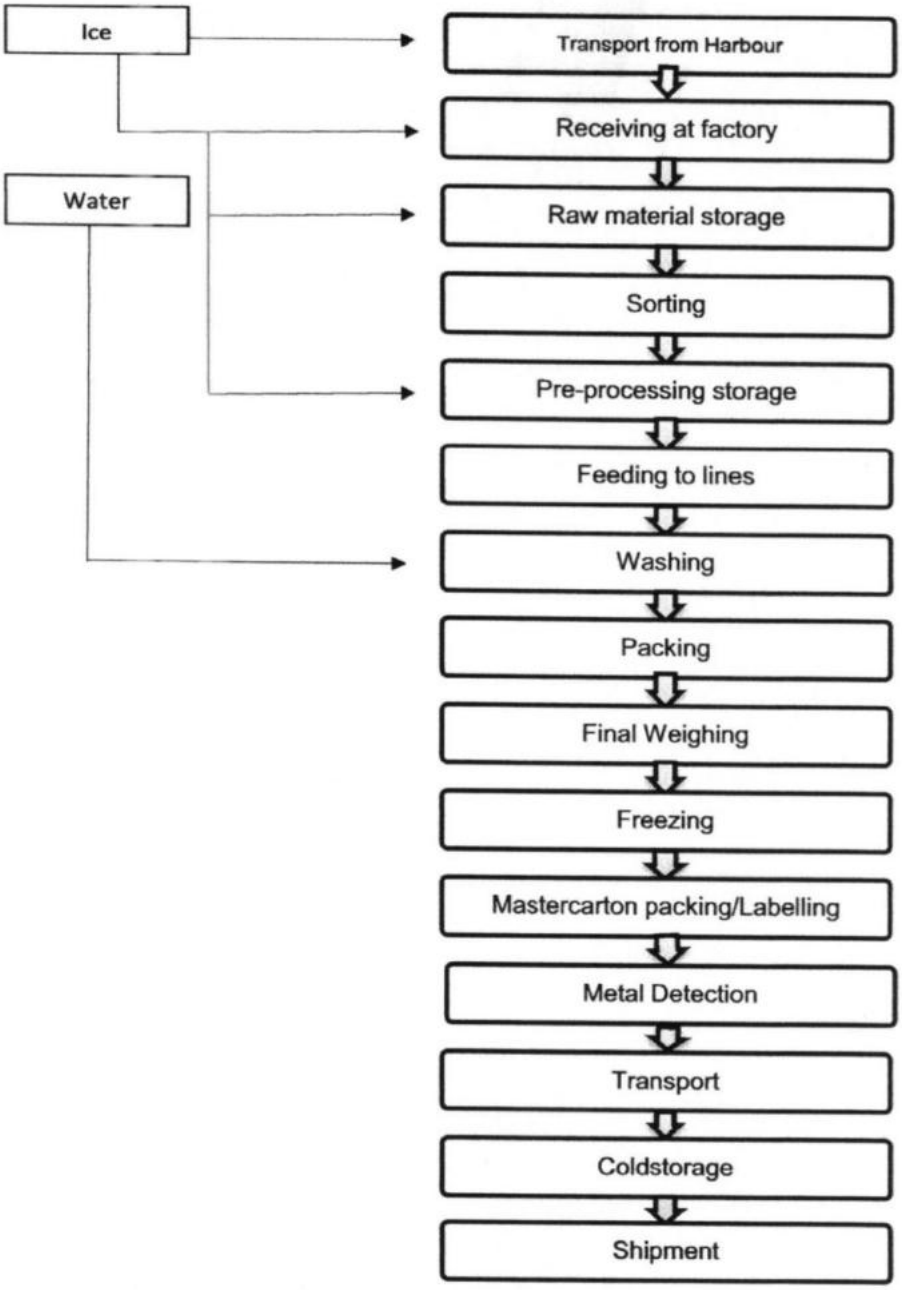

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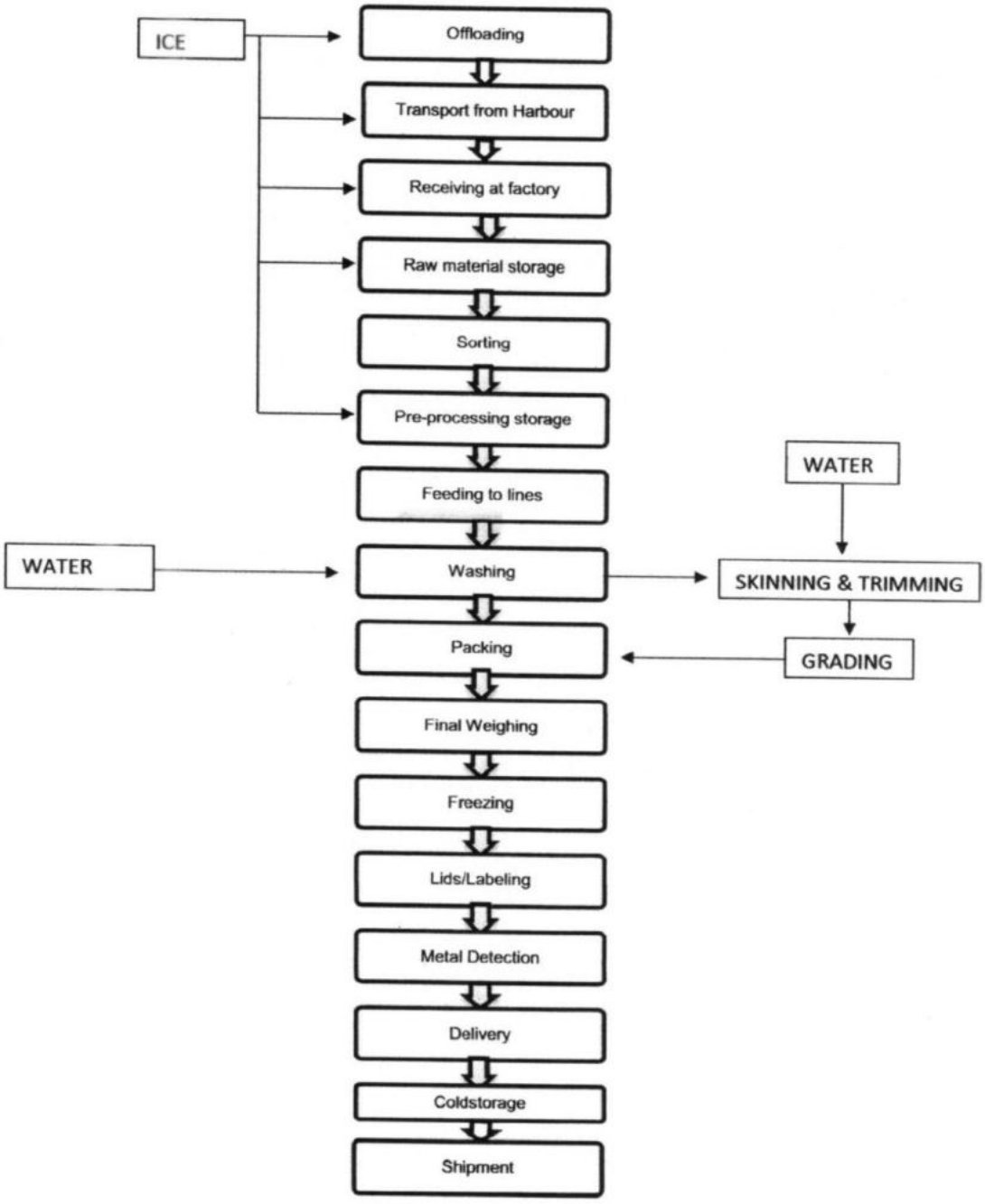
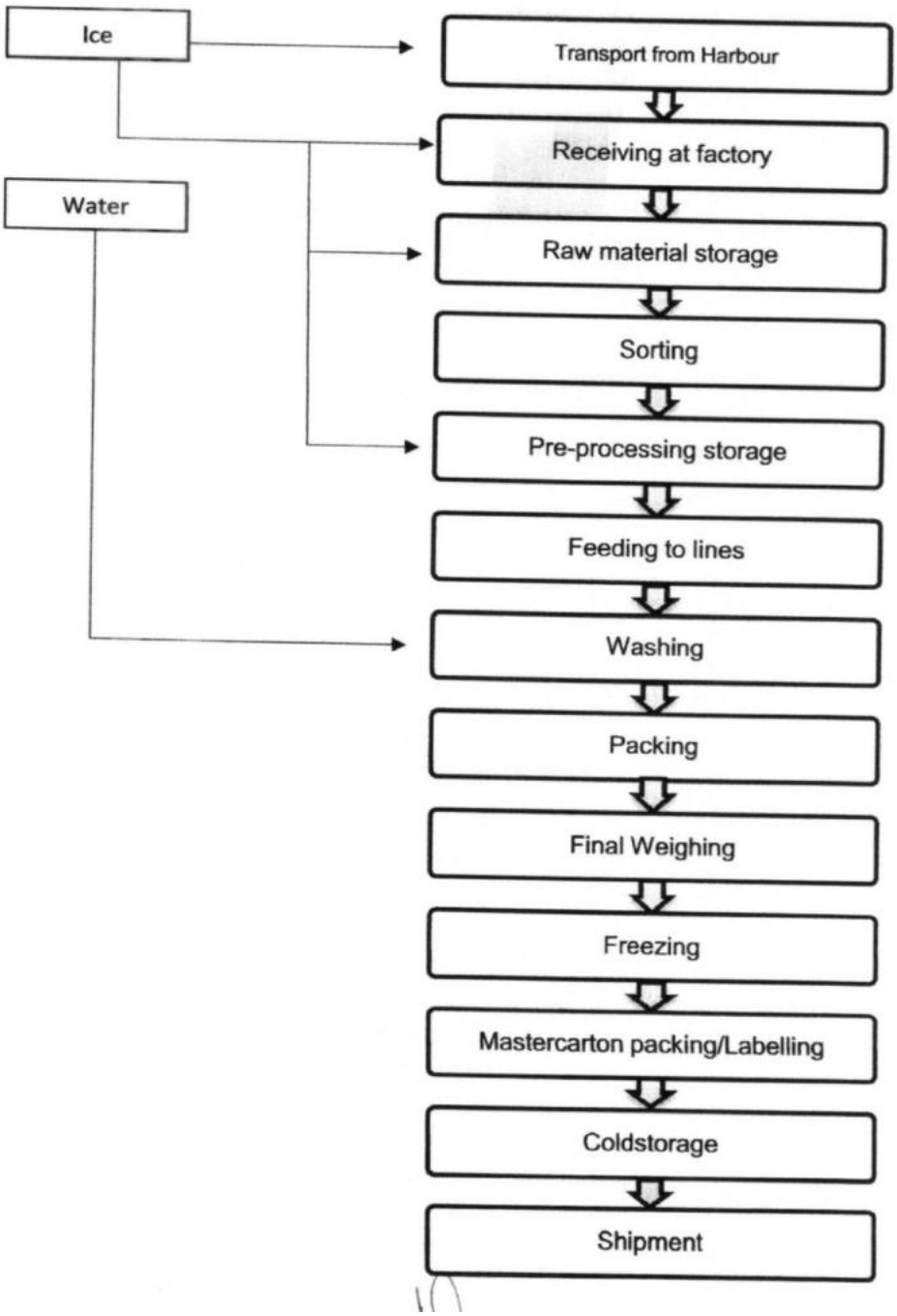


FLOW DIAGRAM – H&G KINGKLIP



4.3. 4.2. Provisional services

The establishment depends on key municipal services for its smooth running. This includes electricity and water services provided by the Luderitz Town Council, making sure that there is a constant flow of production process and sanitation demands. The sewage system of the establishment links directly to the municipality's sewage disposal system, which has sufficient capacity for taking care of the sewage from the establishment. There has been no report whatsoever made by the town council regarding the establishment's discharge of sewage.

4.3. Other operational facilities

4.3.1. Construction and maintenance

The maintenance and repair of infrastructure, machinery, and equipment is done regularly at the facility to ensure that all these components function properly. These tasks are performed either at the site or at maintenance workshops, depending on their nature.

All maintenance and construction tasks are done in line with the environmental and safety guidelines put forth to protect the workers as well as the environment from any hazards posed during construction or repairs. When external contractors are hired for such tasks, they are given environmental and safety training as part of their duties. The contractors are expected to follow the guidelines set by the facility concerning the handling of materials, except where there is an approval by the QM.

4.3.2. Ablution facilities

The facility has ablution rooms specifically set aside for males and females within the entire complex of operation buildings. These ablution rooms are in constant use throughout the day and are kept under very high levels of sanitation.

All waste water emanating from the ablution rooms is disposed of through the municipal sewerage system under the authority of the Luderitz Town Council. It should be noted that the Luderitz Town Council retains full responsibility for sewage.

4.3.3. Canteen and other eating areas

There is a centrally located canteen that employees can use during their tea and lunch hours. Moreover, there are also smaller dining places within the different offices, which allow employees unable to access the central canteen to have somewhere to eat.

All the dining areas are kept under clean and hygienic conditions, and there are cleaning activities conducted daily. The waste arising from the dining areas is well managed by making sure that there are bins put aside for the same, where employees can dump their waste.

4.3.4. Handling and storage areas

The building has set locations where chemicals and products can be stored. Chemical storage areas are employed to store safely any cleaning and disinfection chemicals that may be needed for conducting hygiene practices. The chemicals are handled by the Hygiene team, who ensure that:

- Chemicals are labeled appropriately and have accompanying MSDS (Material Safety Data Sheets);
- Chemical storage areas are secure and access is only granted to authorized personnel;
- Proper handling procedures are always observed.

Handling of chemicals is done by individuals who have had adequate training in order to ensure proper and safe handling. All the chemicals are provided by approved external chemical suppliers. There are also storage areas for products, and these are managed by trained personnel in order to maintain quality and ensure that housekeeping practices are observed in all activities undertaken.

4.4. Waste Management

Waste generation occurs as part of the process in various forms, including plastic waste (hard and soft), cardboard waste, metal waste, wood waste, used oil, fish offal, and effluent wastewater. Offal fish waste is sorted and handled through a waste handling contract service, while other waste streams are handled through cooperation between the facility and the Luderitz Town Council, which handles disposal of these waste streams in municipal waste dumps.

The facility runs under permit authorizations from the Ministry of Agriculture, Water and Land Reform to:

- Dispose of effluent into the marine ecosystem; and
- Withdraw seawater for use in the plant.

A waste management strategy exists within the company to ensure proper waste management and disposal of all waste streams.

5. Training and awareness

Seaflower Whitefish Corporation LTD strives to ensure that all individuals employed in its activities are properly trained and informed about the environmental considerations concerning those activities. Seaflower Whitefish Corporation LTD is dedicated to the development of a responsible attitude towards the environment as well as the observance of all relevant environmental standards and legislation. All employees, contractors, and sub-contractors must be familiar with their respective roles and responsibilities as far as environmental considerations go and the ways they can minimize the adverse environmental impacts of their activities.

For this purpose, Seaflower Whitefish Corporation LTD organizes specialized training and awareness programmes aimed at raising the environmental awareness of all individuals employed by or in other ways affiliated with the organization. Training is provided in accordance with the needs dictated by the environmental considerations pertaining to the activity concerned. New employees and contractors receive specialized induction training prior to beginning their employment, whereas training sessions are also held periodically to review all important aspects related to environmental considerations.

Training is carried out by the HACCP Coordinators from the SHEQ Department during office hours at designated locations within the facility. The topics covered include, amongst others, environmental management, waste management, pollution prevention, emergency response measures, and compliance matters. Other tool-box talk training and awareness programs can also be done depending on specific hazards or incidents.

Registers are kept for all training sessions as proof of attendance. This register contains signatures from all participants in the training as well as confirmation from the trainer. Additionally, all training documents, records, and certificates are systematically recorded and stored by the HACCP Coordinators. They are easily available and can be accessed at any time. Seaflower Whitefish Corporation Ltd undertakes to train and make aware all personnel in order to ensure their competence in meeting the environmental goals of the organization.

5.1. 5.1. Training Plan

An effective Training Plan has been developed and implemented in the SHEQ (Safety, Health, Environment, and Quality) Department. The main purpose of the program is to guarantee proper training of all personnel on necessary competencies and skills to carry out tasks in compliance with safety, health, environmental, and quality requirements.

At the moment of starting their job in the company, all employees undergo induction training to familiarize themselves with various aspects of working according to the specified requirements. Moreover, an employee receives annual refresher training to be up to date with latest changes in requirements or procedures. In addition to these types of training, ad hoc training might be conducted if needed. For example, such training can be required if there were non-conformities discovered after audit, etc.

The Training Plan specifically identifies personnel whose activities have the potential to cause significant environmental impacts. These individuals receive focused, competency-based training tailored to their roles and responsibilities. The objective is to ensure that such personnel are fully competent in executing their tasks in accordance with environmental management requirements, thereby minimizing risks to the environment.

The organization also extends its training requirements to contractors and sub-contractors. Prior to commencing work on site, all external parties are provided with relevant training and induction to ensure they possess the necessary site-specific knowledge, understand applicable SHEQ requirements, and are capable of performing their duties in an environmentally responsible and compliant manner. This ensures alignment with the organization's environmental objectives and standards across all operations.

5.2. 5.2. Safety Health Environmental & Quality Policy

Seaflower's SHEQ Policy acts as a basic guideline that influences all operational processes that take place in the fish-processing plant. The policy sets out the organizational values and the need to ensure high levels of safety and employee health, reduce environmental risks, and provide consistent quality assurance based on all regulations and industry requirements.

The management function, the SHEQ Policy also acts as an important educational means for training and raising awareness among employees. The SHEQ Policy is strategically placed at the entry of the factory, where all visitors can see it. In doing so, the SHEQ Policy allows workers to become constantly aware of the procedures and responsibilities regarding SHEQ practices.

The policy strengthens the culture of compliance and accountability by making employees realize the significance of following safety guidelines, ensuring hygiene in the work environment, safeguarding the environment, and maintaining quality standards at all times during the process. The policy can be seen as an ever-present reminder for consistency in their daily activities. The SHEQ policy is also a tool for refreshing their understanding of workplace policies, regulations,

and good practices. The policy stresses the need for sustainable practices to be integrated into their daily operations.

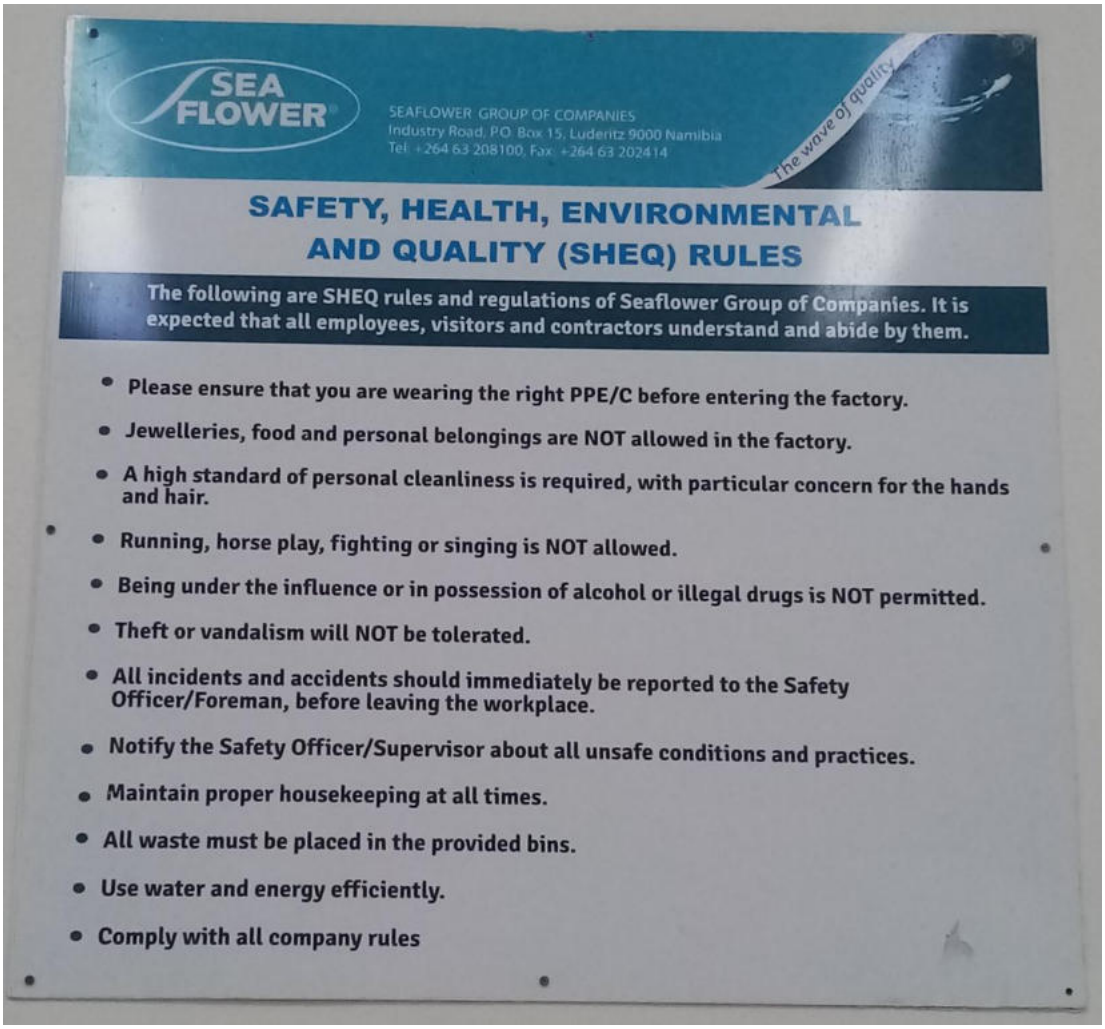


Figure 5.1: SHEQ Policy

6. Environmental aspects/impacts

All operational activities undertaken by the company are conducted in compliance with applicable environmental specifications, legal requirements, and regulatory standards. Environmental aspects associated with the company's activities have been identified, assessed, and managed to minimize potential impacts. Particular attention is given to aspects that require legal and/or regulatory reporting, monitoring, or operational control, which are classified as significant environmental impacts. These are discussed below.

6.1. 6.1. Dust impacts

According to the firm, the amount of dust generated during its operations is quite minimal. The reason behind this is the paving of the site's working grounds as well as the access roads that have been constructed on the site. Therefore, no significant amounts of dust will be generated by both vehicles and wind blowing over the area. Moreover, the project site falls within an urban location where dust is usually controlled. As such, any little dust generated will not have adverse effects on adjacent sites.

6.2. 6.2. Wastewater impacts

The company produces wastewater (effluent) through its operations involving the processing of fish. The effluent is released into the sea under the terms of a legally binding effluent discharge permit granted by the Ministry of Agriculture, Water and Land Reform. The company ensures that the effluent released meets the conditions set out in the effluent discharge permit. Only food-grade and environmentally-friendly chemicals are used in the process of production and cleaning to ensure that there is no damage to the marine ecosystem.

6.3. Solid waste impacts

Solid waste produced in the process of operation is well-managed using a well-defined waste management system. Solid waste is separated from its place of generation and disposed of in specially allocated skips, offal bins, and waste bins according to the type of waste produced in each operational section. Fish offal waste is collected and evacuated by a specialized contractor, whereas other forms of waste are evacuated under an arrangement between the firm and Lüderitz Town Council. The firm stresses the importance of waste management among its workers through training and monitoring. No solid waste is left unattended; therefore, environmental contamination and health hazards are avoided.

6.4. Impacts from hazardous or toxic material

The management and handling of hazardous/toxic materials are highly controlled in order to avoid pollution of the environment and injuries to workers. All materials brought into the facility are checked for adherence to the company policies and regulations. They are handled and used by authorized individuals using the correct procedures. The proper methods of handling, storing, and disposing of the hazardous/toxic materials are put in place in order to reduce the risk of spills or leakage. All hazardous materials have their MSDS/TSDS that guide on how they should be handled and used safely.

6.5. Impact on well-being

The company keeps an environment of work where the health of the workers is considered the topmost priority. Working conditions, which include the temperature level and hygiene requirements, are regulated in such a way that they do not exceed the accepted limits and adversely impact the health of workers. The workers have been suitably trained for their tasks and know about the required operating procedures.

6.6. Pest impacts

Pest management strategies are put in place to ensure there are no pests which can undermine the cleanliness levels of the facility. There are baits and fly catchers spread across the facility. The role of managing pest control lies with the Senior Hygiene Controller who will carry out inspection on a weekly basis and will document the findings from time to time to ensure all the pest control processes are working efficiently. The pesticides that have been utilized are not hazardous to the environment.

6.7. Transportation impacts

The environmental impacts of transport in connection with the facility will be negligible. The traffic flows at the facility will not be too high because they will comprise mainly the vehicles owned by employees, the company's vehicles, and the vehicles used by the contractors. Consequently, traffic flows will be kept at a tolerable level without posing any threat of adding to the problems of congestion, air pollution, or noise in the local neighborhood.

Table 1 below gives a summary of possible potential impacts and mitigation measures that the operational activities of Seaflower can cause to the environment during the operational and decommissioning phase.

Table 1: Environmental Management Plan for Seaflower

Potential impact	Mitigation Measures	Monitoring	Responsibility
OPERATION PHASE			
Solid waste generation	• Waste receptacles including bins, tubs, and skips should be placed in strategic locations across the operational areas and properly labeled for use in collecting solid waste. They should be correctly sized according to the volumes of waste produced in each particular location and should always be emptied to avoid overflows and other problems associated with uncontrolled dumping of waste such as odors and attraction of rodents. • The premises should also have appropriate physical barriers such as fences and walls to prevent any litter from being blown away by the wind into surrounding environments. Since it is a facility situated near the beach and is subject to winds blowing outwards, it may be necessary to install windbreakers to help contain litter, especially light materials such as plastics and paper. • There must be waste segregation protocols which will be officially adopted and shared among all workers. Such protocols should include provisions for segregation of various waste streams like plastics, cardboard and papers, metal, wood, and fish offal. This can be accomplished through installation of bins clearly labeled and color coded for specific types of waste material.	• Weekly Quality control inspections on waste management. • Daily Hygiene control inspections. • Regular physical inspections of whether the waste bins area is clean, and they are being used.	• Quality Controllers • Hygiene Controllers

	• The company should actively identify and engage with licensed recycling companies and waste contractors that can collect and recycle specific waste streams generated at the facility. This may include partnerships for recycling plastics, cardboard, metals, and organic fish waste, thereby reducing the volume of waste sent to landfill and promoting circular economy practices. • A formal waste disposal agreement should be maintained with the Lüderitz Town Council for the collection and disposal of non-recyclable and non-combustible waste. This contract should clearly define collection schedules, responsibilities, and compliance requirements to ensure that waste is managed in accordance with municipal regulations and environmental standards. • The company should implement regular environmental cleaning and housekeeping campaigns within and around the facility at least once every three months. These campaigns should include staff participation and focus on removing litter, preventing waste accumulation in surrounding areas, and reinforcing good environmental practices. The activities should be documented and monitored to ensure continuous improvement.		
Risk of fire explosion	• All sources of fire and heat production, such as electrical appliances, boilers, welders, and other ignition sources, must be periodically inspected	• Yearly safety refresher training to be given to the responsible personnel.	• Line Managers

	and maintained in good working order by the relevant maintenance department to ensure that they do not cause malfunctions or fires. • There should be appropriate firefighting equipment, such as the appropriate fire extinguishers, which should be suitably installed within the fish processing plant premises and its surrounding areas. The firefighting equipment should be periodically inspected, serviced, and replaced as per the appropriate safety guidelines. • Operators of vehicles and forklifts must receive adequate training on fire prevention and firefighting, including the use of fire extinguishers. • Firefighting abilities of personnel must be updated by conducting appropriate refresher training sessions and emergency drills. • There is a need to have designated smoking points that should be strictly observed. The designated smoking points must be situated far from places where there is a high risk of fire outbreaks, including fuel stores, chemical stores, processing areas, and dry plants. • Proper safety signs must be provided and placed appropriately within the premises, including signs showing warning of possible fire hazards, fire escape plans, and assembly points in case of any fire emergency. There must also be an update of the emergency phone numbers placed outside all buildings.	• Weekly and monthly checks of the fire extinguishers by the Safety Representatives.	

	• A safety officer must be appointed on site and given overall authority to coordinate all fire emergency response activities according to the approved emergency response plan.		
Spillage of used oil	• All petroleum products, such as grease, waste oils and lubricants should be contained in containment structures (e.g. plastic liners, drip trays etc). These structures are to be used during all servicing or refueling equipment. • The used should be carefully disposed by the workshop personnel in such a way that it does not spill and should be transported properly for disposal. • Awareness should be enforced regarding the hazardous nature of various types of used oil. • There should be a maintenance and service plans that should be complied with. • Transportation vehicles should be equipped with sufficient equipment and material to contain and remediate any accidental spills, and to remove any contaminated soil or water. • When equipment is serviced and maintained regularly, all leaks should be properly contained and repaired immediately. • Equipment and materials to deal with spill cleanup should be readily available on site and staff should be trained on to how to use the equipment and briefed about reporting procedures.	• Weekly inspection of waste used oil around the premises by Quality Controllers and record/receipts for hazardous waste disposed.	• Quality Controllers • Quality Manager

Risk of health and safety of workers	• The facility should be furnished with a first aid kit which should be equipped with essential first aid supplies. • The company should enforce the use of appropriate Personal Protective Equipment to all employees working at different areas. • There should be trained firefighters, safety representatives as well as first aiders that should be changed at least every 2 years to ensure that many of the employees are trained in safety. • There should be an implemented health awareness program and continuous information sharing sessions on health issues through lectures, posters for the awareness of all employees. • All employees are expected to be familiar with and should be ensured to adhere to the Health, Safety and Security Plan. • There should be a suitable emergency and safety signage on the premises displayed at prominent and conspicuous. • Areas which may pose a safety risk should be demarcated.	• Monthly inspections by the Safety Officer. • Regular medical check-ups (at least yearly for all employees). • Tested drills for health and safety. • Internal audits.	• Quality Controllers • Health workers • HACCP Coordinators
Seawater contamination from effluent discharge	• Effluent discharge should be composed of food-grade cleaning chemicals that are harmless to the environment. • There should be developed procedures in place that allows effluent to be diluted and ensure that it has less concentration of chemicals before being discharged into the sea.	• Daily cleaning monitoring by Quality Controllers to ensure that effluent is sufficiently diluted before discharge. • Adherence to the specified conditions on the permit.	• Quality Controllers • Hygiene Controllers

	• Other hazardous waste should be safely contained, transported, and disposed off by the contracted company.		
Damage of macro and microorganisms in the sea through abstraction	• Water abstraction should be authorized by the Ministry of Agriculture, Water and Land Reform. • The company should adhere to the conditions that comes with the abstraction permit to make sure that the environment is not exploited. • All discharge drains and channels should be checked and cleaned at least weekly. Removal of all excess sedimentation, rubble and any other waste material present in the waterway should be ensured and disposed of in a suitable manner to ensure proper drainage runoff.	• Regular visual inspections. • Internal audits. • Weekly drainage checks and cleaning.	• Water Treatment plant operator
Soil contamination from repairs and maintenance of buildings and equipment	• All maintenance work should be carried out in the workshop, and this should be where oil spills are completely restrained from reaching the ground. • If maintenance is done outside the workshop, there should be procedures in place to ensure that no spillage happens during maintenance work.	• Weekly and monthly inspections on construction and maintenance.	• Quality Controllers • Maintenance personnel
Disposal of defunct equipment's and replaced items as well as contaminated products	• The company should seek for contracted companies with opportunities for re-use of defunct items for other purposes or uses in other areas than disposal.	• Continuous checks on the defunct equipment	• Maintenance and Quality Managers
Environmental awareness	• All persons at the site, regardless of being permanent employees, contractors, or subcontractors, must undergo environmental awareness training before undertaking any tasks within the site. This will ensure	• Regular trainings and refresher trainings at least yearly.	• HACCP Coordinators

	that everyone has an understanding of his or her environmental responsibilities, such as ensuring compliance with environmental legislation, following the Environmental Management Plan (EMP), waste management and disposal, preventing pollution, among others. Refresher training is recommended especially when there are changes within the site, and non-conformances are discovered. • Clearly visible and informative posters should be displayed at strategic positions within the premises like entrances, notice boards, working areas, and facilities for employees. Such posters should act as permanent reminders for environmental standards and would include contact details for emergencies, the procedures that one should follow during an emergency (like spills and fires), and key environmental standards. All the information should be kept simple to facilitate comprehension among both technical and nontechnical personnel, as well as temporary contractors.		
DECOMMISSIONING PHASE			
Transportation of construction material	• All loads should be secured to prevent spillage during the transportation. • All delivery vehicles on impermeable surfaces for delivery of materials should have a proper parking area that prevents contamination from spillage. If this is not practical, drip trays should be used if there are any chances of fuel or oil spills from the delivery vehicles.	• Regular visual inspections.	• Contractor

	• The company should ensure that all haul vehicles transporting fine materials have suitable covers e.g. tarpaulins if there is any chance of dust being created during transport.		
Spills and leaks	• Adherence to established standards on decommissioning of fish processing facilities relating to the removal of any building or related activities to prevent spills and leaks should be maintained. • Prevent spillages of any chemicals and petroleum products (i.e., oils, lubricants, petrol, and diesel). Use drip trays, linings, or concrete floors when evidence of leaks is observed on vehicles or equipment. • All fueling, storage and chemical handling should be conducted on surfaces provided for this purpose. Drip trays, linings or concrete floors must be used when removing oil from machinery. • Spillage control procedures must be in place according to the relevant SANS standards or better. Wastewater collection systems should be connected to these systems. • Proper environmental awareness and remedial response training of operators must be conducted for all staff working o decommissioning operations.	• Regular visual inspections by the Quality Manager. • Daily and weekly inspections by the Quality Controllers • Records or remediations by the HACCP Coordinators.	• Quality Manager • Quality Controllers • HACCP Coordinators • Contractors
Emissions of gas, dust and noise pollution	• All vehicles and equipment that have the possibility of emitting unwanted gases should be kept in good condition. • Engine idling reduction should be encouraged.	• Regular visual inspections of air quality and noise emissions at the site by the Quality Manager. • Inspections on vehicle emissions by the Maintenance Manger	• Maintenance Manager • Quality Manager

	• Ensure that measures are place to minimize dust generated by construction activities. • Avoid excavation, handling and transport of materials which may generate dust under high wind conditions or when a visible dust plume is present. • Use appropriate dust suppression measures when dust generation is unavoidable, e.g. dampening with water, particularly during prolonged periods of dry weather. Such measures may include the use of temporary stabilizing measures (e.g. chemical soil binders, chipping etc). • All vehicles used during the decommissioning phase should be ensured to have reduced noise levels. • Ensure proper maintenance is conducted on vehicles to ensure reduction of noise emission.		
Waste storage and disposal	• The company should ensure that sufficient weather and vermin proof bins/containers are present on site for the disposal of solid waste. Waste and litter generated during the decommissioning phase must be placed in these disposal bins. • When possible, materials used or generated by the decommissioned buildings shall be sorted for recycling or scrap purposes. Ensure that waste generated is segregated, classified, and labelled accordingly. • No unauthorized entry into the waste storage areas. • No disposal of/or burying of waste onsite should be conducted. • No burning of waste on site.	• Visual inspections by HACCP Coordinators. • Weekly inspections by Quality Controllers.	• HACCP Coordinators • Quality Controllers

	• Bins should be emptied weekly or more regularly (when required).		
Disposal of hazardous waste	• Hazardous waste should be separated from general waste, clearly marked, and stored in appropriate containers. • Solid and liquid hazardous waste shall be stored in separate containers. • The hazardous waste storage should be clearly marked to indicate the presence of hazardous substances, and the protocols associated with handling of such hazardous waste shall be known by all relevant staff members. • All contaminated soils, and waste oils, including lubricants and grease from containment systems should be ensured to be disposed at an appropriate hazardous waste disposal site/facility. • Awareness of the hazardous nature of various types of waste should be enforced.	• Visual regular inspection by the Quality Manager and the HACCP Coordinators. • Record of hazardous waste receipt should be kept.	• Quality Manager • HACCP Coordinators
Contamination of seawater	• The contamination of seawater can happen due to oil leakage or spills from oil-fueled machines or equipment into the drainage system. This can only be avoided by ensuring that the equipment is well-maintained and monitored, and all the necessary precautions are taken to prevent the entry of hydrocarbons into the stormwater or marine environment. • Spill prevention and response plans have to be put in place and followed accordingly to meet the stipulated requirements of SANS or internationally	• Regular visual inspections by the Quality Manager and HACCP Coordinators.	• Quality Manager • HACCP Coordinators

	recognized best practices. The spill kit must always be ready for any eventuality. • The release of any pollutants in the drainage system needs to be completely banned. Pollutants include pollutants such as cement, concrete washes, lime, construction chemicals, fuel products, oils, lubricants, and other dangerous substances. There needs to be proper management of these wastes through segregation and disposal procedures to avoid contaminating the stormwater system and marine environment. • Runoff from locations which may have risks of accidental spills of oils or dangerous chemicals (fuel stations, fuel transfer points, car servicing sites, truck washing facilities, and concrete washouts) needs to be managed in such a manner as to avoid discharges of contaminants in the sea and nearby water sources. These places need to have bunds, oil/water separators, and diversion facilities.		
Risk of fires	• Ensure that sufficient fire-fighting equipment is available on site and fire fighting equipment should be suitably maintained. • Ensure that all personnel on site are aware of the location of fire fighting equipment on site and how the equipment is operated. Provide appropriate signage and relevant emergency contact details on site.	• Regular inspections and approvals by the Quality Manager. • Regular reviews of the procedures by the Safety Officer. • Refresher trainings of the Safety Officer and Safety Representatives at least once year.	• Quality Manager • Safety Officer

	• Provide adequate fire-fighting equipment at fuel storage and dispensing areas. • Establish designated smoking area(s) on site. Smoking shall not be permitted in those areas that pose a fire hazard, such as fuel storage areas and areas where flammable material are e.g. wooden pallets storage areas. • No fires are permitted on site except in areas designated by the Quality Manager. Locate such designated areas as far as possible from vegetated areas, flammable material stores and any other high fire risk areas. • Develop fire safety measures to protect the site against fires originating from outside the site.		
Risk of health and safety	• The facility should be furnished with a first aid kit which is equipped with essential first aid supplies. • The company should enforce the use of appropriate Personal Protective Equipment to all employees working at different areas. • There should be trained firefighters, safety representatives as well as first aiders and such personnel should be changed at least every 2 years to ensure that most of the employees are trained in safety. • There should be an implemented health awareness program and continuous information sharing sessions on health issues through lectures, posters for the awareness of all employees.	• Regular quality control inspections. • Regular medical check-ups (at least yearly for all employees). • Tested drills for health and safety. • Internal audits	• Quality Controllers • Health workers • HACCP Coordinators

	• Ensure that all employees are familiar with and are ensured to adhere to the Health, Safety and Security Plan. • There should be a suitable emergency and safety signage on the premises that should be displayed at prominent and conspicuous areas which may pose a safety risk are demarcated.		

7. Documentation and record

The company is expected to develop, implement, and maintain a documented procedure concerning the control of documents and records for all processes and operations. Such a procedure needs to make sure that all the components of the EMS are properly documented in terms of their description, interactions, and other relevant factors, in either hard copies or electronic formats. Documented information must address processes, activities, and other matters that are necessary for effective implementation of EMS within the organization.

All documents are to be reviewed on an ongoing basis, preferably annually but not less often than as the necessity arises due to organizational or regulatory changes. Every document will be given an appropriate revision status with the inclusion of its version number and date. All revisions will be conducted after prior approval. Documents currently being used will be easily accessible to all employees, whereas obsolete documents will be taken out of circulation.

All documentation should be legible, distinguishable, and accessible. The responsibilities and activities that are involved in the process of document creation, revision, review, and approval are outlined in the document control procedure. Also, the organization should have procedures in place for environmental record keeping. It is required that the records are properly managed in order to prove the compliance with environmental requirements as well as proper performance of EMS. All records shall be legible, stored safely, and prevented from damage, loss, and deterioration regardless of their form (hard copies and/or electronic). The retention period of all records should be known and respected.

The records include, but are not limited to, records of environmental awareness programs including training and attendance lists, records of monitoring and inspections, audit reports, incident and corrective action reports, environmental objectives, and performance records. Also, the organization should have an on-site complaint register where any complaints regarding the environment are recorded and responded to.

8. Emergency preparedness and response

The company shall establish, document, implement, and maintain a comprehensive procedure for emergency preparedness and response. This procedure shall systematically identify potential emergency situations and accidents that may have environmental, health, and safety impacts within the facility, including but not limited to power outages, chemical spills, fires, equipment failure, and natural hazards.

The procedure shall outline clear measures to prevent the occurrence of such emergencies where possible, and to effectively control and mitigate their impacts should they occur. This includes the provision of appropriate emergency equipment, communication systems, evacuation plans, and response protocols tailored to the identified risks.

There should be an emergency preparedness and response plan which will be documented and made readily available to all concerned personnel. It is necessary to conduct regular training and awareness seminars to ensure competence of employees when handling emergencies, especially those which may cause harm to the environment. All roles and responsibilities of all personnel in handling emergencies should be specified. These roles and responsibilities should be updated from time to time.

The adequacy and effectiveness of the emergency preparedness and response plans should be tested at least once a year or in the event that there have been new occurrences. The results of these tests should be analyzed and improvements should be incorporated into the process. Continuous improvements should also be made to the entire emergency preparedness and response scheme of the company based on incident reports, drills, and other activities.

9. Internal audits

An internal audit is an integral part of the Environmental Management Plan (EMP). Internal audits ensure that the EMP works effectively and consistently with the compliance requirements of the organization. Regular and systematic internal audits of the EMP should be conducted to ensure that the management measures have been applied adequately and effectively.

An audit plan needs to be established and maintained, covering the details about when and what is to be audited. Audit plans should be risk-based, and therefore, the higher the environmental impact or importance of particular operations, the higher the frequency of the audit and the greater the emphasis on such operations. Audit plans should cover details like the scope and objective,

audit frequency, methods and techniques, as well as roles and responsibilities within the audit process. In addition, the audit plan should include details about documentation and reporting processes, especially how audit results can be communicated to management.

The personnel selected to undertake internal audits must have appropriate competence, training, and qualifications. The personnel undertaking internal audit should have knowledge of environmental management systems and auditing so as to perform their role objectively and professionally. The auditors should have the ability to detect any nonconformities, determine compliance levels, and assess the overall effectiveness of the environmental management plan.

The results of all audits should be recorded in comprehensive and readable reports. Such documents should include any identified nonconformities, observed areas of concern, and suggestions for corrective and preventive measures. It is critical to ensure that such records are accurate, since they may be used in subsequent external or third-party audits to prove the effectiveness and reliability of the environmental management plan. Internal audits should serve the purpose of compliance checks; however, it should not end there, since audits should serve the function of driving continuous improvement.

Table 2 below is the internal audit checklist template that can be used but it is subject to change as per the operations of the company.

Table 2: Template for Environmental Internal Audit Checklist.

1. Environmental policy			
Requirements	**Conformity**		
	Y	**N**	**N/A**
1.1. Has the organization defined and documented its environmental policy?			
1.2. Is the environmental policy based on: Significant environmental aspects? Corporate policy?			
1.3. Is the policy appropriate to the organization's activities and their potential environmental impacts?			
1.4. Does the policy include commitments to: Continual improvement Prevention of pollution Comply with environmental legislation and other requirements to which the company subscribes			
1.5. Does the policy provide a framework for setting environmental objectives and targets?			
1.6. Is the policy documented, implemented, maintained, and communicated to all persons working for or on behalf of the organisation?			
1.7. Is the policy available to the public?			

2. Environmental aspects			
Requirements	**Conformity**		
	Y	**N**	**N/A**
2.1. Has a procedure been established, implemented, and maintained to identify the environmental aspects of its current and relevant past activities?			
2.2. Have aspects related to potential significant environmental aspects been considered in establishing and implementing the EMP?			
2.3. Have aspects having legal and/or regulatory reporting, monitoring or operational requirements been identified as “significant” aspects?			
2.4. Are the following environmental aspects considered in sufficient detail? Air emission Wastewater effluent Waste management Soil pollution Raw material and natural resource usage Hazardous and toxic material			

2. Environmental aspects			
Requirements	**Conformity**		
	Y	**N**	**N/A**
Impact on well-being (e.g. noise, smell, heat, landscape, protection) Utility, energy, and resource Other environmental specific issues on site such as housekeeping, storage, areas, piping			
2.5. Are the following operational aspects considered? Normal operating conditions Abnormal operating conditions (e.g., start up and shut down conditions, maintenance, incidents) Development of new or modified processes, products, or services Actual and potential emergency conditions and accidents			
2.6. Have significant aspects been identified?			
2.7. Are the significance evaluation criteria reasonable and adequate?			
2.8. Are all significant environmental aspects controlled by objectives, targets, and programmes, procedures, or monitoring?			
2.9. Have indirect aspects such as the following considered? Supplier evaluation Subcontractors on site Transportation Products and service-related impacts			
2.10. Have environmental aspects identified and evaluated for planned or new developments, or new or modified activities, products and services?			

3. Resources, roles, responsibility and authority			
Requirements	**Conformity**		
	Y	**N**	**N/A**
3.1. Is an organization chart available?			
3.2. Have responsibilities and authorities for environmental management been defined and documented?			
3.3. Has a Management Representative been assigned?			
3.4. Have the roles, responsibilities, and authorities for the Management Representative been defined?			
3.5. Are the required resources (e.g., personnel, technology, finance) for implementation and control of the environmental management system provided by management?			
3.6. Does the personnel appointed in environmental management have the required competence?			

4. Competence, training, and awareness			
Requirements	**Conformity**		
	Y	**N**	**N/A**
4.1. Have training needs been identified?			
4.2. Are all personnel, whose work can cause significant environmental impacts, competent based on education, training and or experience?			
4.3. Have procedures been established to assure all persons working for or on behalf of the company are aware of the Environmental Policy, actual and potential impacts, and their responsibilities?			
4.4. Has the organization ensured that personnel performing environmental specific tasks have the required knowledge (e.g., education, training experience)?			
4.5. Does the communication process ensure that business partners, suppliers and contractors are aware of the relevant requirements of the organization ‘s EMP?			
4.6. Do the contractors working on site have the requisite knowledge and skills or have been trained to perform the work in an environmental responsible manner?			
4.7. Are training records, certificates, and licenses available to demonstrate the competence?			

5. Communication			
Requirements	**Conformity**		
	Y	**N**	**N/A**
5.1. Are procedures maintained for communication of environmental issues between various levels of the organization?			
5.2. Are procedures maintained for receiving, documenting, and responding to communications from external interested parties?			
5.3. Has the organization recorded its policy and/or processes for external communications on its significant environmental aspects?			

6. Control of documents			
Requirements	**Conformity**		
	Y	**N**	**N/A**
6.1. Are procedures maintained to ensure periodic review and appropriate revision of all required documents?			

6. Control of documents			
Requirements	**Conformity**		
	Y	**N**	**N/A**
6.2. Are current versions of all required documents available at all essential locations?			
6.3. Are obsolete documents promptly removed or otherwise assured against unintended use?			
6.4. Is all documentation legible, readily retrievable, and identifiable, and revision level or date identified?			
6.5. Have procedures been established for the creation modification and appropriate approval of the various types of documents?			

7. Operational control			
Requirements	**Conformity**		
	Y	**N**	**N/A**
7.1. Are activities associated with significant environmental aspects planned and carried out under specified conditions?			
7.2. Have documented procedures been established, implemented, and maintained for operations associated with significant environmental aspects, policy, objectives, and targets?			
7.3. Have, during development of the documented procedure, the following elements considered? Activities where their absence could cause deviation from environmental policy, objectives, and targets Stipulating operating criteria and limits for control of the important activity characteristics Control processes of significant environmental aspects of products and services Release of new or modified processes and products			
7.4. Are, during the development of the documented procedures, other indirect impacts considered?			
7.5. Have procedures been established relating to the significant environmental aspects of materials and services purchased and used by the organization?			
7.6. Have procedures been established to communicate relevant procedures and/or requirements, regarding environmental aspects of purchased products or services, to suppliers and subcontractors?			

8. Emergency preparedness and response			
Requirements	**Conformity**		
	Y	**N**	**N/A**
8.1. Have procedures been implemented to identify the potential for and respond to accidents and emergencies?			
8.2. Have procedures been established to prevent and mitigate impacts of accidents and emergencies?			
8.3. Are emergency procedures tested where practicable?			
8.4. Are emergency plans available? Are procedures defined to ensure that environmental impacts of accidents and emergency situations are mitigated?			
8.5. Are the responsibility defined to review and revise, where necessary, the emergency preparedness and response procedures?			

9. Monitoring and measurement			
Requirements	**Conformity**		
	Y	**N**	**N/A**
9.1. Have procedures been documented and implemented to monitor key characteristics of operations that can have significant impacts?			
9.2. Has any environmental performance indicator that relates to objectives and targets been established?			
9.3. Are records available to track performance and conformity with objectives and targets?			
9.4. Are all monitoring equipment appropriately maintained and calibrated?			

10. Nonconformity, corrective action and preventive action			
Requirements	**Conformity**		
	Y	**N**	**N/A**
10.1. Have procedures been established to define the responsibility for handling, investigating, and controlling, and mitigating nonconformity?			
10.2. Are corrective and preventive actions timely, appropriate, and effective?			
10.3. Are procedures changed and/or updated because of corrective action and preventive action?			
10.4. Does the procedure include the fact that complaints from interested parties are to be integrated in the process?			

11. Management review			
Requirements	**Conformity**		
	Y	**N**	**N/A**
11.1. Do periodic management reviews take place to ensure the continuing suitability and effectiveness of the EMP?			
11.2. Does management review result in changes as appropriate to the policy, objectives, targets etc.?			
11.3. Are management reviews records retained?			
11.4. Are the reviews carried based on the following documents or information? Audit results reports Evaluations of compliance with legal requirements and other requirements to which the company subscribes Achievement of environmental management system objectives and targets Communications and complaints from relevant interested parties The environmental performance of the organization Status of corrective and preventive actions Follow-up actions from previous management reviews Changing circumstances, including developments in legal and other requirements related to its environmental aspects, and Recommendations for improvement			

10. Conclusion

Implementation of the Environmental Management Plan (EMP) should result in significant minimization and management of adverse environmental and social impacts that might be caused by the proposed activities. Provided the plan is followed correctly, the implementation of the EMP will give an opportunity to manage, mitigate, and monitor risks identified as a result of the analysis carried out.

It should be pointed out that all environmental and social risks identified can be addressed with the help of preventative measures and effective environmental management. In case any impacts have occurred despite all efforts made, it is crucial to take immediate actions aimed at preventing aggravation of the situation, as well as returning the affected components to their initial state.

It is also highly advisable to consider installing a dissolved air flotation plant on site to facilitate more effective treatment of effluent generated as a result of fish processing activities. With the installation of the plant in question, the levels of such pollution indicators as Biological Oxygen Demand and Chemical Oxygen Demand will drop dramatically.

The EMP will act as a vital source of information during the operations phase and decommissioning period of the project. Environmental audits will be carried out to evaluate whether there is compliance to the provisions laid down in the EMP and that the mitigation measures have been implemented as expected. Non-compliance to the EMP or any environmental damage due to negligence will have to be sorted out by implementing remedial actions.

The responsibility to ensure continued relevance of the EMP lies with Seaflower Whitefish Corporation Ltd. The EMP will be evaluated at intervals for revision or updating due to operational changes or new environmental conditions. The continued relevance and effectiveness of this EMP rely on review and proper adaptation to changes and implementation of the same.

11. Recommendations

Recommend ECC to be renewed for Seaflower Whitefish Corporation Ltd.

ANNEX A: EXPIRED ENVIRONMENTAL CLEARANCE CERTIFICATE

ECC – 2300232 Serial:23ifhB9232

REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT, FORESTRY AND TOURISM

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

ENVIRONMENTAL CLEARANCE CERTIFICATE

ISSUED

In accordance with Section 37(2) of the Environmental Management Act (Act No. 7 of 2007)

TO

Seaflower Whitefish Corporation LTD
P. O. Box 15, Luderitz

TO UNDERTAKE THE FOLLOWING LISTED ACTIVITY

Continued Operation of the Existing Seaflower Whitefish processing facility in Luderitz,//Karas region

14 MAR 2023

ENVIRONMENTAL COMMISSIONER

Issued on the date: 2023-03-07

Expires on this date: 2026-03-07

(See conditions printed over leaf)

Reduce Reuse Recycle

NAMIBIA USE A TRASH BIN DO THE RIGHT THING

This certificate is printed without erasures or alterations

ANNEX B: CONSULTANT CV

Name of Consultant: **Rauna Nghifikwa**
Profession: **Environmental Consultant**
Date of Birth: **25 February 1994**
Nationality: **Namibian**
Membership in Professional bodies: **None**

Key Qualifications:
Rauna NN Nghifikwa is an environmental practitioner with over six years of progressive experience in environmental impact assessment, environmental management, and regulatory compliance across infrastructure, energy, and municipal development projects in Namibia.

In 2019, while employed at Environam Consultants, she served as the Lead Environmental Practitioner for the Establishment and Operation of a Fuel Storage Facility in Walvis Bay, Erongo Region. She held full responsibility for coordinating the Environmental Impact Assessment (EIA) process, including project screening, scoping, baseline environmental studies, stakeholder consultations, impact identification, mitigation planning, and compilation of the Environmental Management Plan (EMP). She also liaised directly with regulators and project proponents to ensure statutory compliance.

In 2020, she was a Lead Environmental Practitioner with Environam Consultants for the Construction and Operations of a Fuel Storage Facility in Walvis Bay. This assignment involved a higher degree of responsibility, including managing project timelines, supervising specialist inputs, addressing public and authority comments, and supporting the environmental clearance process through approval.

In 2023, she was appointed as an Assistant Environmental Practitioner at Lana Environmental Consultancy for the Construction, Operation, Maintenance, and Decommissioning of the Proposed Ondangwa–Omutsegwonime Phase 1–3 Pipeline Replacement Project in the Oshana and Oshikoto Regions. Her responsibilities included supporting baseline data collection, stakeholder engagement processes, impact assessment, and EMP development for linear infrastructure.

In 2025, she further supported Lana Environmental Consultancy as an Assistant Environmental Practitioner on the Gibeon Upgrade Project in the Hardap Region, contributing to environmental assessments, compliance monitoring, and documentation for infrastructure upgrades.

Education:
Rauna NN Nghifikwa holds **a Bachelor of Science (Honours) in Fisheries and Aquatic Sciences,** obtained from the **University of Namibia in 2018**. The degree provided a strong foundation in environmental science, ecological systems, data analysis, and resource management.

She is currently finalizing a **Master's Degree in Integrated Environmental Management and Sustainable Development** at **The International University of Management**, Namibia. The programme focuses on advanced environmental governance, sustainability planning,

environmental policy analysis, and the application of integrated management systems in development contexts.

Employment Record:

Environmental Consultant
RJ Dynamics Investment cc
Walvis Bay, Namibia
2023 – Present

Responsible for providing environmental consultancy services including Environmental Impact Assessments, Environmental Management Plans, environmental compliance monitoring, and advisory services for development projects. Duties include project coordination, client liaison, report preparation, regulatory submissions, and supporting environmental clearance applications. Assignments span infrastructure development, municipal projects, and private sector initiatives.

Assistant Environmental Practitioner
Lana Environmental Consultancy
Namibia
2023 – 2025

Provided technical support on major infrastructure projects, including the Ondangwa–Omutsegwonime Pipeline Replacement Project (Phases 1–3) in Oshana and Oshikoto Regions and the Gibeon Upgrade Project in the Hardap Region. Responsibilities included environmental baseline data collection, impact assessment support, stakeholder consultation assistance, EMP development, and compliance reporting under the supervision of senior practitioners.

Reference:
Nangula Amutenya – Environmental Practitioner
Lana Environmental Consultancy
Cell: 0812024059

Environmental Consultant / Environmental Practitioner
Environam Consultants
Walvis Bay, Namibia
2019 – 2022

Served as Lead Environmental Practitioner on fuel storage facility projects in Walvis Bay (2019 and 2020), with full responsibility for EIA coordination, stakeholder engagement, impact analysis, mitigation planning, and EMP preparation. Also participated in environmental audits, inspections, and quality, environment, health and safety (QEHS) management system activities. Supported incident investigations and regulatory compliance processes for industrial and energy-related developments.

Reference:
Colin P. Namene – Chief Executive Officer
Environam Consultants
Cell: 0814584297

Environmental Officer (Volunteer)
Municipality of Walvis Bay

Walvis Bay, Namibia
February – June 2019

Assisted with environmental compliance and regulatory functions within the local authority. Responsibilities included supporting the authorization and review of EIAs, participating in environmental inspections, assisting with environmental awareness initiatives, and supporting waste management and sustainability activities.

Reference:
David Uushona – Environmental Manager
Municipality of Walvis Bay
Cell: 0811220814

EIA Research Assistant
University of Namibia
Namibia
2018 – 2019

Conducted academic research on stakeholder knowledge and effectiveness of Environmental Impact Assessments in Namibia. Responsibilities included literature review, data collection, stakeholder analysis, and research reporting, contributing to broader understanding of EIA implementation challenges in Namibia.

Reference:
Dietlinde Nakwaya - Lecturer
University of Namibia
Cell: 0812770639

Languages:

Language	**Speaking**	**Reading**	**Writing**
English	Excellent	Excellent	Excellent
Oshiwambo	Excellent	Excellent	Excellent

Certification:
I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

CV Updated: ***20 April 2026***

Full name of Consultant: Rauna NN Nghifikwa

ANNEX C: AUDIT REPORT

ENVIRONMENTAL MANAGEMENT PLAN (EMP) AUDIT REPORT

Audit Details

Client Name: **Seaflower Whitefish Corporation Ltd**

Facility: **Fishing Factory in Luderitz**

Audit Date: **14 April 2026**

Auditor: **RJ Dynamics Investment cc**

Audit Type: **Internal EMP Compliance Audit**

1. Audit Scope

The extent of the audit was focused on the examination of the degree of the organization's compliance with the provisions of its Environmental Management Plan (EMP). Such an examination entailed the assessment of the commitment shown by the management together with the assignment of environmental responsibilities. Another aspect that was covered during the audit was the facility's compliance with legal and regulatory requirements, as well as its policy on environmental management and its dissemination among employees and other relevant parties involved. Moreover, it was important to evaluate the efficiency of employee training, which would ensure the possession of adequate knowledge and skills in the field of environmental management by the staff of the organization.

Environmental aspects and impacts relating to the operations of the facility were also included in the assessment, with an eye towards assessing the efficiency of the measures taken to counteract any risks that may arise. In particular, the efficiency of certain operational areas, such as waste, wastewater and the storage/disposal of harmful substances was also assessed in terms of best practice and regulation compliance. Additionally, the assessment included reviewing operational controls in place for the purpose of reducing environmental impact, and the level of readiness in case of emergencies from an environmental point of view.

The audit evaluated the procedures in place for detecting and handling nonconformances, as well as the measures taken to implement corrective and preventive action procedures in response to the discovered non-conformities. The sufficiency of document control systems to facilitate adequate and up-to-date recording and maintenance of information related to the environment was examined. Finally, the audit evaluated how effectively the internal auditing programs and the management review process have contributed towards achieving improvements and maintaining conformance with the EMP. The audit utilized a comprehensive self-assessment audit questionnaire, whereby audit findings were recorded depending on the results of the assessment by the facility.

2. Audit Summary

Based on the audit results, the facility is noted for its good compliance with the provisions of the EMP. Most of the reviewed aspects, such as controls, waste management, housekeeping, pollution prevention, and overall environmental awareness, are successfully performed and maintained. There are proper procedures and controls already in place, and the facility maintains sufficient levels of documentation, monitoring, and internal controls. This suggests that there is a systematic approach to environmental management and that the facility is committed to maintaining its environmental standards and reducing the possible impact of its activities.

The facility's employees seem aware of their environmental obligations, and the observations made during the audit reveal that there is integration of environmental considerations into regular activities. There are measures taken to reduce risks, and there is a constant effort to ensure continuous improvement.

Although generally good performance has been witnessed, there has been one case of non-conformance related to compliance issues. In this regard, the plant does not have a current and valid Environmental Clearance Certificate (ECC) as stipulated by law as a prerequisite for operating legally in the country. The lack of a current ECC constitutes a major gap in compliance as it makes the plant vulnerable to penalties under the law and prevents full compliance to the country's environmental law. This calls for urgent measures to rectify this situation by ensuring the ECC is acquired.

3. Detailed Audit Findings

3.1. Management Commitment & Responsibilities

It is evident from the audit findings that there is an appointed Environmental/Quality Manager for this facility, who has been assigned the responsibility of managing the implementation, operation, and improvement of the EMP. These are roles and responsibilities that have been clearly delineated in the organizational structure and are supported by the job description documents for this role.

It is evident that the management is highly committed to environmental management because it provides the required resources for this purpose, which include people, time, and finance. In addition, there is provision for monitoring, training, and controlling environmental activities in this regard. There is clear communication on environmental responsibilities at all organizational levels through internal communications and induction processes.

Moreover, there are management activities for contractors that ensure compliance with the EMP. Environmental commitments are explained to contractors before beginning their tasks, and it is also noted that contractors are being supervised to ensure compliance with the environmental procedures. The facility displays a proactive attitude towards environmental management, which involves good management, responsibility, and communication.

Status: Compliant

3.2. Legal Compliance

There have been efforts by the facility to determine the environmental legislation, regulations, and standards that apply to their operations. In particular, these include observance of national environmental laws, industry-specific standards, as well as the various permits that exist for waste disposal, emission, effluent discharge, and general environmental protection. From the evidence collected throughout the audit, it can be said that the facility has made efforts to meet its obligations to these laws by developing some form of controls to meet these obligations.

It is important to note that one critical shortcoming in the facility's environmental management system concerns statutory authorization. The facility does not have a valid Environmental Clearance Certificate (ECC). Such an ECC is a necessary pre-requisite for carrying out all listed activities in terms of the existing national environmental laws. The failure of a facility to have an ECC means that it has failed to meet an important requirement and may thus find itself being subjected to legal action.

Not only that, but the lack of proper maintenance of the ECC could indicate problems on the part of the facility with its monitoring systems for registration and compliance as well as the renewal process. It is highly important that the facility immediately starts the process of renewing its ECC.

Status: Non-compliant

3.3. Environmental Policy & Awareness

There is an Environmental Policy that is officially established, approved, and adopted into practice within the organization. This policy highlights the company's dedication to protecting the environment, preventing pollution, and complying with environmental regulations. The Environmental Policy is posted at visible locations within the premises to facilitate easy access to the document.

The Environmental Policy is also made known through different internal communications, such as inductions, training, and regular meetings, to ensure comprehension and implementation of the policy. The Environmental Policy acts as a guide to all environmental management efforts conducted within the premises.

It is important to note that it is compulsory for all persons who enter and work within the premises, regardless of whether they are permanent staff, contractors, and subcontractors, to undertake environmental awareness training before they start performing any tasks.

The environmental awareness training focuses on areas such as:

- Conformity to all applicable environmental laws and regulations
- Following the Environmental Management Plan (EMP)
- Waste management techniques, which include segregation, handling, storage, and disposal
- Prevention of pollution, including spill prevention and response actions
- Efficient natural resource usage, such as water and energy
- Environmental emergency planning and response

By adopting this method, all employees are provided with adequate knowledge and accountability to reduce any potential environmental hazards and improve the facility's environmental performance. Environmental awareness is maintained through regular training, toolbox discussions, and supervision.

Status: Compliant

3.4. Training & Competence

An organized training program on environmental matters has been put in place within the facility to make sure that all staff members and contractors are made aware of their environmental duties. This training includes environmental matters concerning the running of the facility such as handling waste, preventing and managing spills, controlling pollution, conserving resources, and meeting legal and regulatory requirements.

All new staff and contractors receive induction training before they start working at the facility, which informs them about the environmental hazards at the facility and how to manage them. Refresher training programs are also organized to keep everyone updated about the EMP and other related environmental matters.

In addition to the aforementioned training programs, specialized training sessions have also been conducted for employees involved in activities that carry high risks, or those who have environmental duties like handling hazardous materials, managing waste, and dealing with environmental emergencies. Contractors too are trained, as well as made to prove their competence level. The contractors receive the same training as employees in cases where they perform the duties of employees.

Proper documentation of training is done. Relevant data recorded includes topics covered, training attendees, dates when the training was conducted, and facilitator details. All training information is kept safely and can be accessed anytime when needed for auditing purposes. Based on what has been stated above, it is clear that the organization has an excellent environmental awareness and competence program.

Status: Compliant

3.5. Environmental Aspects & Impact Management

An organized method for identifying, evaluating, and controlling environmental aspects and their resulting impacts as a result of the organization's activities has been developed by the organization. The systematic assessment of each environmental aspect and their significant is performed based on the regulatory requirements, operational activities, and environmental hazards that may be involved.

Major environmental aspects like solid waste generation, discharge of wastewater, management of hazardous materials, and pest control have been systematically assessed and are being controlled using relevant documented processes. Appropriate mitigating actions have been developed in order to minimize the effects on the environment. Such mitigating actions include proper segregation and disposal of waste, controlling the quality of wastewater discharge, proper handling and storage of hazardous materials, and implementing appropriate pest management programs.

Periodic evaluations and inspections are done by the organization to make sure that the measures put in place to manage the risks are effective and implemented appropriately. Corrective and preventive measures are taken to rectify any deficiency or possible environmental risk that may occur. The organization exhibits an effective environmental management system, which ensures that any major environmental risk is managed properly.

Status: Compliant

3.6. Waste Management

Waste management procedures have been set and enforced at the facility. The audit revealed that waste segregation is conducted within the facility. The different categories of waste are separated to ensure proper disposal and treatment. General, recyclable, and hazardous waste can be segregated based on their categories.

Proper waste storage facilities have been set up within the premises. The facilities are equipped to handle the waste without contaminating the environment. Proper measures are taken to prevent leakage, spillage, or blowing of the waste to other locations by the wind. The waste facilities are kept clean and tidy. They are regularly checked to comply with housekeeping and environmental regulations.

Waste contractors who are properly licensed to handle waste have been authorized to collect, transport, and dispose of the waste from the facility. The use of contractors helps to enforce the regulations concerning waste management within the facility. The waste contractors will help to minimize the impact on the environment.

In addition, there is good maintenance in the waste handling zones, where good housekeeping was also observed during the inspection. Waste handling control access and discipline help maintain hygienic and environment-friendly conditions.

The recycling program is either established or progressively established within the organization as part of efforts to reduce waste and use resources efficiently. It ensures that there is minimal waste disposed of in landfills. From the observations made, the waste management program seems to be effective.

Status: Compliant

3.7. Wastewater & Effluent Management

An audit was performed to determine whether wastewater and effluent management systems at the facility were properly controlled and operated within the set parameters as stipulated by existing laws and permit conditions. Effluent generation, processing, and discharge are conducted using systems designed to have minimal effects on the environment and are in line with relevant regulations.

Effluent discharge occurs according to terms of a permit, which states the maximum limits allowed for discharge and the monitoring process. All wastewater produced from production and auxiliary operations at the facility is managed using an appropriate treatment mechanism prior to its discharge, whether treated on-site or at an authorized off-site treatment facility.

On-site treatment involves the use of proper treatment methods to minimize pollutant concentrations to a manageable level before discharging effluents. Processes involved are continually monitored to ensure effective treatment. Proper measures are enforced to ensure untreated effluents are not discharged.

Active compliance monitoring is conducted to ensure that the discharge criteria are met. This encompasses the continuous testing and evaluation of parameters related to effluent quality compared to those permitted, together with the documentation of the findings of such monitoring activities. Any variance from the prescribed standards is supposed to be detected and dealt with accordingly. From the information gathered, there appears to be ongoing compliance with regard to wastewater and effluent management requirements by the facility.

Status: Compliant

3.8. Hazardous Substances Management

There was assurance that the management of the dangerous substances in the plant is taking place in compliance with relevant health and safety standards.

Dangerous substances have been stored in appropriate and safe storage facilities that are constructed in such a way as to prevent leaks and any unauthorized entry to the area. The facilities used for storing the substances are mostly kept in good condition and have been isolated from other incompatible substances.

All the substances that have been checked are appropriately labelled based on the GHS standard guidelines, meaning that the label provides information about the product, its hazards, and other relevant information.

Material Safety Data Sheets (MSDS/SDS) are kept for all hazardous substances present at the facility. Such data sheets are easy to find for both staff members and supervisors. This way, important information such as proper handling procedures, possible effects on human health, first-aid action procedures, safe storage conditions, and incident response steps can be easily accessed.

The employees who handle hazardous substances have undergone chemical safety and safe handling procedures training, during which they have been informed about possible risks associated with such chemicals, correct wearing of PPEs, and what measures to take in case of emergencies. Moreover, the spill prevention measures have been taken, which include the provision of spill kits in or near the location where spillages are most likely to happen. The

process of controlling spills in case they occur has been clearly described and communicated to employees.

Secondary containment procedures are applied (when necessary). Thus, it is quite unlikely that environmental contamination would take place in case of an accidental release. In general, this management system for hazardous substances is quite efficient and effective since it aims to prevent accidents from occurring and minimize their negative impact on the environment.

Status: Compliant

3.9. Operational Control

Procedures have been prepared and followed for managing those operations that could potentially cause an impact to the environment. These procedures outline the guidelines with regard to how the operation should be conducted so that environmental risks can be controlled and minimized.

As far as maintenance is concerned, it takes place in a manner that incorporates the concepts of pollution prevention and good housekeeping. Maintenance is conducted in a controlled fashion to avoid any leakage or spills of harmful substances into the environment. In certain cases, where it is needed, drip trays and spill kits are used during maintenance operations.

The storage of materials, which includes hazardous chemical substances, oils, lubricants, and others, takes place in a clearly marked area. Such storage facilities are made in such a way as not to cause any environmental pollution by providing appropriate bunding, containment, and segregation of incompatible substances. Inspections are carried out to ensure that there is no leakage from the container. It is important to note that all containers must be labeled, sealed, and undamaged.

There are procedures for material handling that are carried out according to regulations. Employees receive training regarding how to handle materials in the proper manner, and it is evident that staff are aware of environmental considerations and follow established procedures. Operations control is successfully incorporated in day-to-day operations. Environmental requirements are taken into consideration when conducting maintenance, storing, and handling materials. There are no cases of pollution caused by such activities.

Status: Compliant

3.10. Emergency Preparedness & Response

Emergency preparedness and response plans have been developed and documented in a manner that considers the risk of operations and possible environmental and occupational health hazards. The plans are easily accessible, and the information has been adequately disseminated to all workers to ensure that they know how to act in case of any emergency.

Training on emergency procedures such as evacuation and reporting incidents has been done for all the staff members. This is evident through the training records showing that competence has been sustained by reinforcing the knowledge and skills of the personnel.

Regularly scheduled drills have been carried out for emergency purposes. These drills are conducted to evaluate the adequacy of the emergency plan and employee preparedness. They involve the practice of emergency procedures by simulating a specific emergency scenario. Findings from the drill results are captured for improvement of the emergency response plan.

Essential equipment, including fire extinguishers, spill kits, alarm systems, and first aid kits, is available, easily accessible, and undergoes regular inspections and maintenance to ensure readiness for any situation. Inspection records show that the equipment is maintained based on industry recommendations and the manufacturer's requirements. The emergency planning and response system is fully functional and is constantly being developed to enhance its effectiveness.

Status: Compliant

3.11. Monitoring & Inspections

Environmental audits are regularly being undertaken at the facility, ensuring that there is constant compliance with the EMP and any relevant environmental regulations. This is done in accordance with scheduled timelines, as well as on an ad hoc basis where needed, especially after any operational or environmental incidents have occurred.

In the course of these environmental inspections, several environmental matters are evaluated, such as the management of wastes, spill prevention and spill response, the state of storage areas, housekeeping, and compliance with permit and licensing requirements. Any non-compliances observed are then reported to the concerned individual(s) for necessary follow-up actions. A systematic monitoring system is in place to keep track of all environmental inspections undertaken and the follow-up actions taken, thus serving as a record of compliance.

Monitoring of the indicators of environmental performance is continuously performed to determine the success of the mitigation efforts. Environmental indicators might involve the quantity of wastes generated, number of spills, water and energy consumption levels, as well as compliance with operating controls. This process ensures continuous improvement and helps inform decision-making processes. All things considered, it can be said that the monitoring and inspections procedures established perform their tasks adequately.

Status: Compliant

3.12. Non-Conformances & Corrective Actions

This audit has confirmed that there is a well-organised process in place to identify, document and control environmental incidents and non-conformities. Any incidents or any non-conformity to the EMP, legislation or other company practices are systematically documented using the proper reporting tool.

As soon as a non-conformity or an environmental incident becomes apparent, a thorough investigation is conducted, which includes the identification of the reasons for occurrence of such a non-conformity, the level of environmental risk and the possible/actual impact. This will also help in establishing corrective measures depending upon the seriousness of the non-conformity.

It is evident that not only corrective but also preventive measures have been set for concerned people, along with a deadline for implementing them. It is confirmed that these measures have been consistently followed up on, monitored, and checked until their successful completion. Moreover, it is noted from the documents that follow-up measures have been validated for their effectiveness so that any such occurrence does not recur in future. There have been proper records of non-conformances kept by the organisation in which not only the description of incidents and their investigation results are documented, but also the corrective actions, their implementation, and closing process have been recorded.

It has been seen that the organisation fulfills this requirement entirely based on the documents presented to the auditor.

Status: Compliant

3.13. Documentation & Record Keeping

It was found that there is an effective control system for the maintenance of the EMP documentation. All documents pertaining to the Environmental Management Plan are kept in their most recent versions, ensuring that any old documents are taken out of service and replaced by updated versions. This minimizes the chances of applying the older, outdated requirements and provides a consistent approach to environmental management.

Records arising out of EMP implementation tasks have been adequately stored and organized. These include monitoring reports, inspection checklist, incident reports, correction measures, and training records (as applicable). The records can be easily traced and retrieved on demand, if need be.

There is a formally established complaints register which has been efficiently maintained. It contains information such as date of receipt of the complaint, description of the complaint, findings, actions taken in response to the complaint, and closure of the issue. The document and records system is effective and functional.

Status: Compliant

3.14. Internal Audits & Management Review

There is an internal audit program for environmental management system developed by the organisation and implemented according to a predetermined audit schedule. This audit schedule details the scope, frequency and duties related to the conduct of internal audits for environmental management. The audits involve a review of all activities within the organisation on a periodic basis as part of this audit schedule.

These audits are performed by competent individuals who are independent of the activities being audited. The audits include an assessment of compliance against environmental laws and regulations, company procedures, and the Environmental Management Plan. Any instances of deviation from these standards as well as any non-conformities are recorded accordingly.

Audit results are documented in the form of formal audit reports, which are submitted to management for analysis and follow-up. Usually, such reports highlight non-conformities, observations, and necessary corrective and preventive measures to address issues. Management is responsible for the assignment, tracking, and implementation of appropriate corrective actions to address any gap or deficiency.

Furthermore, the organization carries out management reviews at regular intervals to determine the effectiveness of its EMS. As part of the management review process, information such as the outcomes of internal audits, compliance, EMS performance indicators, stakeholder requirements, and corrective actions taken by the organization is considered.

Conclusions drawn from management reviews help in making decisions regarding continual improvement. Generally, the internal audit and management review systems are working effectively and contributing to continual improvement.

Status: Compliant

4. Key Strengths

4.1. Commitment of management towards environmental compliance

It has been noted during the audit process that there exists an excellent level of commitment on the part of management towards environmental compliance. Management shows itself highly concerned with ensuring that environmental compliance is achieved, which means that efforts to understand and ensure compliance to environmental laws and regulations are made throughout the organizational levels. This includes provision of necessary resources for ensuring environmental compliance.

4.2. Implementation of EMP requirements in all areas of operation

Environmental Management Plan (EMP) requirements are fully implemented in all operational areas where the company operates. It is obvious that not only EMP procedures are implemented, but also operational controls are consistent with environmental requirements. In particular, it was noted that mitigation techniques are not only recorded, but also actually implemented by the company.

4.3. Training and awareness and communication systems

The firm has developed effective training and awareness strategies among its personnel. The employees have been made aware of the dangers, the mitigation strategies for them, and the roles they need to play within the framework of the EMP. Effective communication system has been put in place, which ensures that all the environmental aspects are communicated to all the parties concerned.

4.4. Proper handling of waste, wastewater and hazardous substances

Effective handling systems for waste, wastewater and hazardous substances have been developed. The waste is properly segregated, stored and disposed. The company's

wastewater handling process prevents pollution of the surrounding environments. The hazardous substances are well marked, segregated and stored, and proper disposal is undertaken as per procedure in order to prevent any leakages or spillages.

4.5. Monitoring and auditing procedures with continual improvement initiatives

A strong environmental monitoring and auditing procedure already exists within the organization, ensuring that there is constant evaluation. Audits and inspections are done to ensure that EMP objectives have been achieved and legal considerations adhered to. Results obtained from monitoring exercises are recorded and considered for future improvement purposes. Continuous improvement is shown through the filling of gaps and improving on environmental management practices.

5. Areas for Improvement

It was found necessary to enhance compliance with relevant environmental laws and regulations, especially concerning the legitimacy and relevance of environmental permissions. It is imperative that all the required permits, licenses, and clearance certificates must be acquired before commencing activities and must be continuously monitored for their validity during the project's entire operating period.

A systematic system of monitoring for compliance should be put in place for the management of expiration periods, renewals, and other changes in environmental legal conditions. This will require maintaining a current list of environmental laws and regulations that include the authorization requirements.

The task of conducting compliance monitoring must be delegated officially to the respective individuals so that everyone remains accountable. Compliance audits need to be done periodically to avoid any risks of compliance lapses or expiry of licenses in good time. Incorporating this element will help to mitigate the possible risk of non-compliance, legal consequences, disruptions in the organization's operations, and damage to its reputation.

6. Non-Conformance Identified

Non-Conformance: Lack of Valid Environmental Clearance Certificate (ECC)

From the analysis, it has been found that the operation is being carried out without having a valid Environmental Clearance Certificate (ECC), according to the relevant environmental laws and regulations that exist in Namibia. Lack of valid ECC is a significant non-conformance issue because ECC is a statutory requirement, which verifies the conduct of the Environmental Assessment process and its approval. Below are the consequences in detail, the lack of a legally valid ECC will lead to the following consequences, among others:

6.1. Regulatory non-compliance

The facility will be in violation of the applicable environmental regulations regarding listed activities, leading to the possibility of regulatory action against the responsible parties.

6.2. Administrative sanctions

The ongoing operation without a valid ECC will likely result in sanctions, such as fines, suspension of operations, issuance of compliance directives, or even the withdrawal of operating permits.

6.3. Higher operating risks

The lack of an approved ECC, along with its corresponding Environmental Management Plan (EMP), will mean that environmental risks (e.g., pollution, improper waste management, and disturbance of wildlife habitats) cannot be properly managed and mitigated.

6.4. Damage to reputation

The organization will suffer from reputational damage due to non-compliance with environmental regulations, possibly affecting future projects and approval processes.

6.5. Suspension or delay of operations

The regulatory body may suspend or delay operations pending compliance, which can cause financial loss and operational disruptions.

7. Corrective Action Plan

Finding	Corrective Action	Responsibility	Timeline
No valid Environmental Clearance Certificate (ECC)	The organisation must immediately initiate the process for obtaining or renewing the Environmental Clearance Certificate (ECC) in accordance with the Environmental Management Act and requirements of the competent authority. This includes: (i) engaging a registered Environmental Assessment Practitioner (EAP) if not already appointed; (ii) confirming the project's listed activity status under relevant regulations; (iii) preparing and submitting the application dossier, including updated Environmental	Management / Environmental Manager	Immediate initiation – submission within 30–60 days; ongoing follow-up until ECC approval is obtained

	Management Plan (EMP), supporting technical reports, and proof of compliance with prior conditions (if applicable); (iv) addressing any outstanding compliance gaps identified during internal review or inspection; and (v) ensuring full coordination with the Environmental Commissioner's Office until approval is granted.		

8. Overall Compliance Rating

☐ Compliant

☒ Partially Compliant

☐ Non-Compliant

9. Conclusion

Based on the results of the audit process, it is possible to conclude that there is a highly structured Environmental Management Plan (EMP) in force at the facility. Overall, the environmental performance of the facility observed by the auditor suggests high levels of environmental management, awareness, and control according to the EMP guidelines. Environmental aspects related to waste management, pollution prevention, spills, and housekeeping seem to be under consistent environmental control as per the EMP provisions.

There is high compliance within the major operational and administrative areas of environmental management. The systems employed at the facility indicate that the environment-related risks are being properly recognized and controlled using routine control measures and monitoring procedures. Compliance with EMP policies seems to be high, which speaks volumes about the environmental management at the facility in question.

However, despite all the mentioned advantages, it has been established that there is a substantial gap in terms of obtaining authorization from regulators. Currently, the facility is not authorized in terms of its legal status since the Environmental Clearance Certificate (ECC) has not been obtained. In this regard, the lack of authorization is a significant aspect of non-compliance, considering that the ECC is the certificate authorizing an activity as being environmentally assessed.

The lack of authorization implies possible measures from regulators. However, apart from this disadvantage, one can note that without authorization, the formal aspect of compliance of the implemented EMP will be violated since only internal compliance will not make any difference.

It would thus be highly advised that immediate measures be implemented to normalize the status of the ECC under the concerned environmental authority. The acquisition of valid certification is important for ensuring full compliance and providing the necessary assurance that all activities are being carried out within a proper environmental management framework.