NEXITY INVESTMENTS CC

DARE TO BE DIFFERENT, DARE TO INNOVATE

SEAGULL FISH PROCESSORS (Pty) Ltd

&

MERLUS CORMORANT FISHING (Pty) Ltd

ENVIRONMENTAL MANAGEMENT PLAN FOR SEAGULL & MERLUS CORMORANT FISH FACTORIES IN WALVIS BAY

SEAGULL FISH PROCESSORS

MERLUS CORMORANT FISHING (PTY) LTD

DATE: APRIL 2023

DOCUMENT CONTROL

Report Title	ENVIRONMENTAL MANAGEMENT PLAN FOR SEAGULL & MERLUS CORMORANT FISH FACTORIES IN WALVIS BAY
Report Author	Nexity Investments CC
Client	Seagull Fish Processors (Pty) Ltd & Merlus Cormorant Fishing (Pty) Ltd
Project Number	NI2023SG/MCF2
Report Number	1
Status	Final to MEFT
Issue Date	April 2023

ENVIRONMENTAL MANAGEMENT PLAN FOR SEAGULL & MERLUS CORMORANT FISH FACTORIES IN WALVIS BAY

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ACRONYMS AND ABBREVIATIONS

Below a list of acronyms and abbreviations used in this report.

Acronyms / Abbreviations	**Definition**
Abroma	Abroma Fishing Industries (Pty) Ltd
DEA	Department of Environmental Affairs
ECC	Environmental Clearance Certificate
EIA	Environmental Impacts Assessment
EMP	Environmental Management Plan
EMS	Environmental Management System
Env Dept.	Environmental Department
GM	General Manager
ISO 14001	International Standards Organization 14001
MEFT	Ministry of Environment, Forestry and Tourism
Merlus Cormorant	Merlus Cormorant Fishing (Pty) Ltd
Seagull	Seagull Fish Processors (Pty) Ltd
SHE	Safety, Health and Environment
SHEQ	Safety, Health, Environment and Quality

ENVIRONMENTAL MANAGEMENT PLAN FOR SEAGULL & MERLUS CORMORANT FISHING FACTORIES IN WALVIS BAY

*(**Note**: The approved EMP has been amended as part of the* Environmental Clearance Certificate (*ECC) Amendment Application. All changes from the previously approved EMP are highlighted in grey in this document).*

1 INTRODUCTION

Seagull Fish Processors (Pty) Ltd (Seagull) is a Namibian fish processing company and has been operating in Walvis Bay, Namibia since 2012. The Company is processing and packing fresh and frozen fish products. Seagull's fish factory (i.e. fish processing facility) is located in Ben Amathila Avenue, in the Walvis Bay industrial area (refer to Figure 1).

Previously the factory was operating under "Abroma Fishing Industries (Pty) Ltd" (Abroma), however, the facility is registered under Seagull Fish Processors (Pty) Ltd. Abroma acts as the client of Seagull and the administrative company that manages the relevant systems but is not producing / processing any fish.

Merlus Cormorant Fishing (Pty) Ltd is a Namibian fish processing company and started operating in Walvis Bay, Namibia in 2023. The company will process and pack frozen and fresh fish products. Merlus Cormorant fish factory (i.e. fish processing facility) is located in Ben Amithila Avenue, in the Walvis Bay industrial area (refer to Figure 1).

Seagull has implemented an Environmental Management System (EMS), which is ISO 14001 certified & Merlus Cormorant is in the process of have its own Environmental Management System (ISO 14001). Refer to Appendix A for Seagull's Environmental Policy.

This Environmental Management Plan (EMP) documents the environmental management and mitigation measures which are designed to (pro-actively) avoid or minimize the potential impacts associated with Seagull & Merlus Cormorants fish processing actives, which ties in with the above-mentioned EMS.

This EMP specifically relates the Seagull's fish processing activities at their fish factory and was prepared on the basis of similar activities conducted by Merlus Cormornat Fishing (with similar throughput, i.e. tons of fish per annum) conducted for the past ±6 years; as well as the above mentioned EMS.

No formal Environmental Impact Assessment process (EIA) was therefore conducted in developing the original / approved (2018) EMP, however, enough information could be obtained from the historic operations and EMS documentation to prepare informed management and mitigation measures, presented in section 9 of this document.

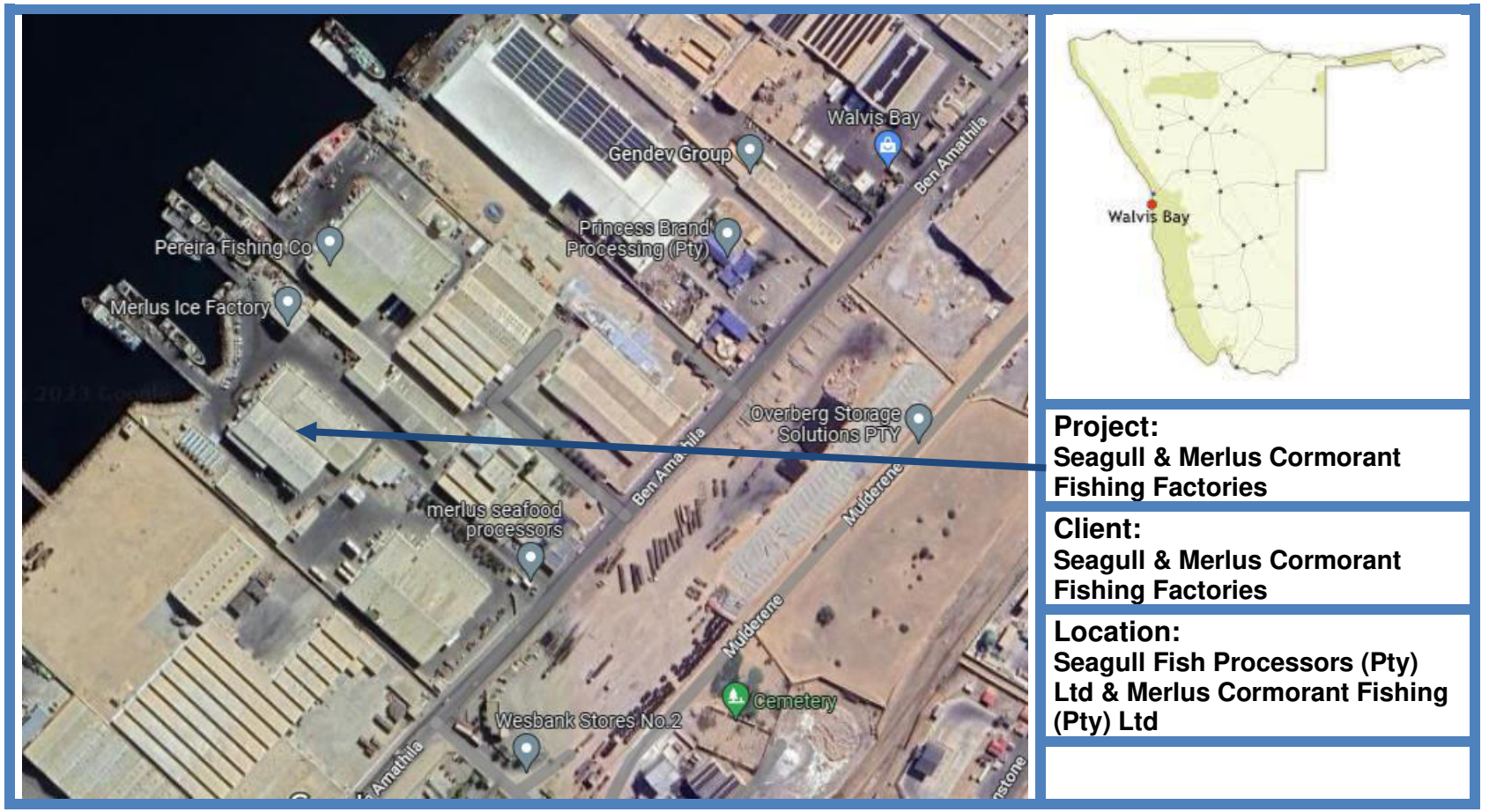


FIGURE 1: SEAGULL & MERLUS CORMORANT FISHING FACTORIES – NEW FACILITIES

2 KEEPING THE EMP CURRENT

It is the intention that this EMP should be seen as a "living document" which will be amended during Seagull & Merlus Cormorant ongoing fish processing operations, as the activities might change or new once be introduced. This is also in line with the requirements for continuous improvement of Seagull & Merlus Cormorant's ISO 14001 EMS.

Should a listed activity(s) as defined in the Environmental Impact Assessment Regulations: Environmental Management Act (EMA), 2007 (Government Gazette No. 4878) be triggered, as a result of future modifications/changes at the fish factory, this EMP will be required to be updated through an EIA process as stipulated in the EMA and its Regulations.

To allow for a decrease in the overall freshwater consumption, Seagull is considering to abstract between 5 and 10 m^3 / day seawater and to use that raw, untreated seawater to melt used ice from the process in the factory. This will be done in the factory's effluent water treatment plant. The melted ice mixed with seawater will be discharged back into the sea. Prior to the implementing the proposed seawater abstraction and associated activities, an ECC is required, based on an approved EIA Amendment Report and amendments to the approved Seagull & Merlus Cormorant EMP, where relevant – as reflected in this report.

3 SCOPE OF THE EMP

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

TABLE 1: CONTENT OF THE EMP

Component	EMP Reference
General introduction to Seagull & Merlus Cormorant fishing factories	Section 1
Keeping the EMP current	Section 2
Details of the persons who prepared the EMP and the expertise of those persons to prepare an environmental management plan.	Section 3
The Scope of the EMP	Section 4
Environmental Legislation relevant to Fishing Factories and associated fish processing activities.	Section 5
Overview of the fishing factories and fish processing and associated activities.	Section 6
A description of the aspects and impacts associated with the fishing factories that are covered by the EMP.	Section 7
Overall environmental objectives.	Section 8
Information on any proposed management or mitigation measures to address potential environmental impacts that have been identified through the Seagull & Merlus Cormorant EMS and a review of the historic fish processing activities.	Section 9
An identification of the persons to be responsible for the implementation of the mitigation measures.	Sections 10 and 11
Proposed mechanisms for monitoring compliance with the EMP and	Section 12

4 ENVIRONMENTAL LEGAL FRAMEWORK

Relevant legislation, standards currently in force in Namibia include:

- The Constitution of the Republic of Namibia of 1990.
- Environmental Management Act (Act 7 of 2007) and Regulations promulgated in terms of the Act.
- The Soil Conservation Act (Act 76 of 1969) & the Soil Conservation Amendment Act (Act 38 of 1971).
- The Water Act, No. 54 of 1956 and Water Resources Management Act, No. 11 of2013.
- Dumping at Sea Control Act (Act 73 of 1980).
- Marine Resources Act (Act 27 of 2000).
- Aquaculture Act (Act 18 of 2002).
- Namibia Ports Authority Act (Act 2 of 1994).
- Labour Act 11 of 2007.
- Local Authorities Act (Act 23 of 1992).
- Affirmative Action (Employment) Act No. 29 of 1998.
- Nature Conservation Ordinance of 1975.
- Atmospheric Pollution Prevention Ordinance 11 of 1976.
- Hazardous Substances Ordinance No. 14 of 1974.
- Draft Pollution Control and Waste Management Bill of 2003.
- Prevention and Combating of Pollution of the Sea by Oil Act (Act 6 of 1981) as and Amendment Act (Act 24 of 1991).
- Petroleum Products and Energy Act No. 13 of 1990, as amended.
- Road Traffic and Transport Act No. 22 of 1999.
- The National Policy on Coastal Management for Namibia (2013).
- The Integrated Coastal Management Bill (2014).

Relevant Municipal By-law and regulations include the following:

- Integrated Urban Spatial Development Framework for Walvis Bay.
- Integrated Environmental Policy of Walvis Bay.

- Drainage and plumbing by-law of 1958.

The following Internal Convention has relevance to the Fish Factory and associated activities:

- Benguela Current Commission.

4.1 ENVIRONMENTAL PERMITS AND APPROVALS

The following environmental (and social) permits/authorisations are in place:

- Agreement with NamPort to operate in the Walvis Bay port and to discharge effluent into the sea at the port.
- Permit from the Municipality of Walvis Bay to discharge effluent (domestic effluent, i.e. sewage) into the municipal sewer system.
- Permits and license required in terms of the Water Act (Act 54 of 1956) and the Water Resources Management Act (Act 11 of 2013) including:
    - Water (seawater) abstraction permit.
    - Domestic and industrial wastewater and effluent discharge permit.
- Affirmative Action Compliance Certificate.

Further important notes:

- A letter was submitted to the Ministry of Environmental and Tourism: Department of Environmental Affairs (MET:DEA) in November 2018, to confirm whether Seagull would need to apply for an application for an Environmental Clearance Certified (ECC) for their activities associated with their current fish processing activities.
- Merlus Management (part of the Group of Companies) installed a number of new above ground diesel tanks on their new Fish Factory premises. These tanks were subject to an EIA process, for which and ECC was issued by MET. The activities associated with these tanks therefore fall outside the scope of this EMP.
- This EMP relates only to Seagull & Merlus Cormorant ('in-land') activities, associated with their fishing factories and was amended to include additional management and mitigation measures relating to the proposed sea water abstraction and related activities.

5 OVERVIEW OF THE FISHING FACTORIES AND FISH PROCESSING (AND ASSOCIATED) ACTIVITIES

With reference to section 1, Seagull recently completed the construction of their own fish factory and commenced operations (at this new facility) in November 2018. Their activities are similar in nature and scale to that at the 'previously leased premises'. The new factory is however an improvement in terms of certain equipment, including (amongst others) Ammonia Refrigeration used for chilling and freezing (compared to Freon R22 refrigeration at the leased premises) and an improved system for separating effluent, scales, ice, and clean water prior to the effluent being discharged into the sea.

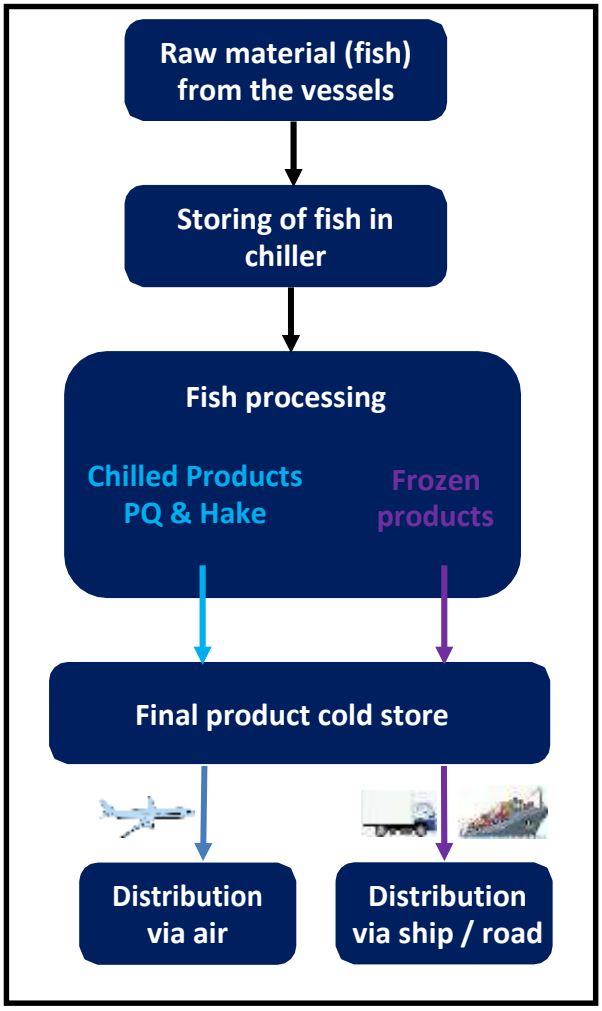
Refer to Figure 1 for the location of Seagull's new fish factory.

With reference to section 1, Merlus Cormorant recently completed the construction of their own fish factory and commenced operations (which is a new facility) in February 2023. Their activities are similar in nature and scale to that at the 'Seagull Fish Processors'. The new factory is however an improvement in terms of certain equipment, including (amongst others) Ammonia Refrigeration used for chilling and freezing and makes use of Seagull Fish Processors system for separating effluent, scales, ice, and clean water prior to the effluent being discharged into the sea.

5.1 FISH PROCESSING

A simplified process flow of Seagull Fish Processors & Merlus Cormorant Fishing processing activities is illustrated in Figure 2 and further discussed below.

FIGURE 2: SIMPLIFIED PROCESS FLOW FOR SEAGULL FISH PROCESSORS & MERLUS CORMORANT FISHING PROCESSING ACTIVITIES



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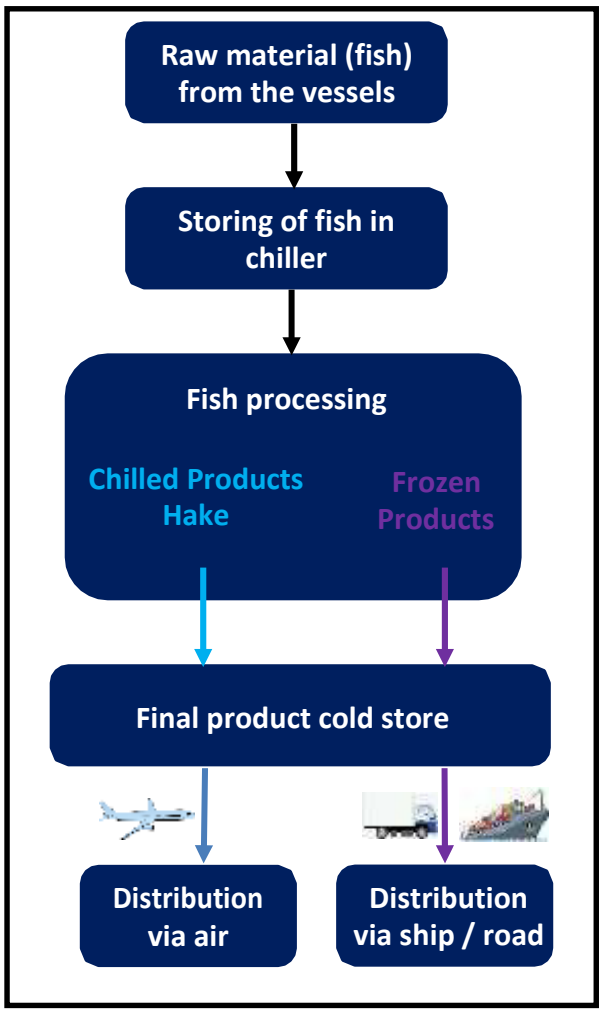

MERLUS CORMORANT FISHING (PTY) LTD

5.1.1 RAW MATERIAL (FISH) FROM ABROMA 'S VESSELS

The raw material (i.e. the gutted fish caught) is received from the Abroma (approved) vessels, as per Abroma's Hake quota. The fish is delivered to the factories iced. Plastic sheeting is used between the fish and the ice.

5.1.2 STORING OF FISH IN CHILLER

The fish received from the vessels are stored in a chiller shared by Seagull & Merlus Cormorant. Ammonia refrigeration is used.

5.1.3 FISH PROCESSING – SEAGULL FISH PROCESSORS

From the chillers, the fish gets processed according the following products for Seagull Fish Processors:

1. Chilled Prime Quality (PQ) (including Hake, Kingklip, Monk and Angel Fish).
2. Chilled Hake Fillets.
3. Frozen products.

Seagull processes, on average, a total of ±636 tonnes of fish per month.

5.1.3.1 Chilled PQ

The chilled PQ is processed as follows:

- Remove shrink wrap and plastic layer,
- de-ice the fish,
- wash the fish with clean water,
- inspect the quality and conduct manual grading,
- checking of texture,
- packing, weighing and labelling,
- ice lolly (i.e. 'ice pack'), lidding, closing and metal detecting, and
- palletizing – ready for distribution.

5.1.3.2 Chilled Hake fillets

The chilled PQ is processed as follows:

- De-scaling the fish,

- cutting of the heads and tails (the heads and tails are sold for either bait, fishmeal or, certain parts for delicatessens),
- wash the fish with clean water,
- filleting and trimming,
- manual size grading,
- candling (i.e. pesticide checking),
- packing, weighting and labeling,
- transferring to blast freezers for pre-cooling,
- ice lolly, lidding, closing and metal detecting, and
- palletizing – ready for distribution.

5.1.3.3 Frozen products

Some of the chilled product get frozen prior to distribution. The additional process (continued from the chilled products) include the following:

- Plate freezing / Blast freezing.
- Lidding, marking, and strapping.

5.1.4 FINAL PRODUCT COLD STORE

The final product is placed in the cold store, prior to distribution. Ammonia refrigeration is used for chilling and freezing. Freon R 507 is used for the cold store.

5.1.5 DISTRIBUTION OF PRODUCT

Most of the final chilled products are distributed abroad (mostly to Spain) through air transport. Frozen products are transported via ship or road transport (container / trucks). Some of the 'by-catch' are sold to the local Namibia market.

5.2 FISH PROCESSING – MERLUS CORMORANT FISHING

From the chillers, the fish gets processed according the following products for Merlus Cormorant Fishing:

1. Chilled Prime Quality (PQ) (including Hake, Kingklip, Monk and Angel Fish).
2. Chilled Hake Fillets.
3. Frozen products.

5.2.1.1 Chilled Hake fillets

The chilled H&G processed as follows:

- De-scaling the fish,
- cutting of the heads and tails (the heads and tails are sold for either bait, fishmeal or, certain parts for delicatessens),
- wash the fish with clean water,
- filleting and trimming,
- manual size grading,
- candling (i.e. pesticide checking),
- packing, weighting, and labeling,
- transferring to blast freezers for pre-cooling,
- ice lolly, lidding, closing and metal detecting, and
- palletizing – ready for distribution.

5.2.1.2 Frozen products

Majority of the chilled product get frozen prior to distribution. The additional process (continued from the chilled products) includes the following:

- Plate freezing / Blast freezing.
- Lidding, marking, and strapping.

5.2.2 FINAL PRODUCT COLD STORE

The final product is placed in the cold store, prior to distribution. Ammonia refrigeration is used for chilling and freezing.

5.2.3 DISTRIBUTION OF PRODUCT

Most of the final chilled products are distributed abroad (mostly to Spain) through air transport. Frozen products are transported via ship or road transport (container / trucks). Some of the 'by-catch' are sold to the local Namibia market.

5.3 FACTORY CLEANING

Various types of chemicals are used for cleaning the factory and equipment. These chemicals are all "food safe approved" and biodegradable.

5.4 CHEMICALS USED

With reference to section 6.2, various "food safe approved" chemicals are used to clean the factory and equipment. These chemicals are diluted to the required specifications to ensure the permit conditions are adhered to when discharged into the harbour.

Other chemicals used include:

- Heat exchange chemicals
- Workshop chemicals.

5.5 SOLID WASTE

The types of waste that are generated at the factory include:

- Hazardous and non-hazardous waste;
- general waste (domestic ad other non-hazardous recyclable/re-usable waste); and
- small amount of medical waste (from first aid treatments).

Solid waste consists of the following:

- Domestic waste,
- Office waste - including papers, light bulbs, empty printer cartridges, redundant electronic equipment, etc.
- Medical waste,
- Non-reusable wooden pallets to store finished products
- Empty chemical containers,
- Redundant PPE and equipment, batteries, tyres from forklifts, etc.
- Used plastic lining, shrink wrap, cartons and waste packaging,
- Non-reusable plastic tubs, bins and pallets,
- Fish scales

- Relatively small volumes of hazardous waste from the workshop, i.e. thinners, lacquers, etc. (see section 6.9).

5.6 SEWAGE AND OTHER LIQUID EFFLUENT

Permanent ablutions facilities are established as part of fish factory complex. Sewage and grey water collected from kitchen sinks and elsewhere in the facility are discharged into the Walvis Bay Municipal sewer system. Seagull obtained a permit from the Walvis Bay Municipality to discharge this effluent in their system.

Other effluent from the fish factory that is discharged into the port (sea) include:

- Wash water (from cleaning the fish),
- some fish scales that end up in the wash water,
- factory wash water and cleaning chemicals, and
- bleed from the cooling towers.

5.7 PEST CONTROL

A number of 'pests' at the fish factory needs to be managed and controlled. These include, rodents, cats and birds (i.e. Seagulls).

5.8 WATER USE

Water used at the plant is municipal (NamWater) water. On average Seagull & Merlus Cormorant uses ± 7,800 m^3 water per month for the fish processing and associated activities (including the cleaning of the factory, domestic use, etc.).

Seagull is considering to abstract between 5 and 10 m^3 / day (i.e. maximum ~ 3 650 m^3 / annum) seawater at for use (the raw, untreated seawater) to melt used ice from the process in the factory. This will be done in the factory's effluent water treatment plant. The melted ice mixed with seawater will be discharged back into the sea. Additionally, Seagull plan to use the raw seawater to clean the effluent water treatment plant and the immediate area around it, consisting of interlocks.

The intake location will be at Seagull's factory. The intake pump would be designed for a maximum of 10m^3 / day. A new pipeline for the abstraction of the seawater will be constructed from the intake to the factory. The current effluent discharge pipeline will be used for the discharge of all factory effluent from both Seagull & Merlus Cormorant to the sea.

Which will include the abstracted seawater used at the at effluent water treatment plant for melting ice. Therefore, no other infrastructure would be required for the discharge of the used seawater.

5.9 ELECTRICITY SUPPLY

Seagull Fish Processors & Merlus Cormorant Cormorant fish factories are connected to the (NamPower) grid.

5.10 WORKSHOP AND MAINTENANCE

Seagull & Merlus Cormorant operates a relatively small workshop on the same premises as the factory for maintenance of equipment, etc. Some painting, welding, grinding, etc. is, amongst others conducted at the workshop. Hydrocarbon contaminated waste is stored in the workshop. Old oil is taken by WESCO and other hydrocarbon contaminated waste is disposed of at the hazardous waste facility at Walvis Bay.

5.11 EMPLOYMENT

Seagull employs approximately 255 people at their fish factory. Merlus Cormorant employs approximately 170 people at the fish factory. All these employees are Namibians. The Managing Director of the Company is from Spain.

5.12 SITE ACCESS AND SECURITY

The Fish Factory is accessed from Ben Amathila Avenue. Access is controlled through security guards at the gate.

6 ENVIRONMENTAL ASPECTS AND IMPACTS SUMMARY

Table 2 provides a summary of the environmental aspects and potential impacts associated with Seagull & Merlus Cormorant fish factories and associated activities.

TABLE 2: SUMMARY OF ENVIRONMENTAL ASPECTS AND IMPACTS ASSOCIATED WITH THE FISHING FACTORIES AND ASSOCIATED ACTIVITIES

Activity	Aspect	Potential Impact
Fish processing		
• Cleaning of fish and descaling	Wash water and (some) scales released into the sea (port)	• Environmental degradation through organic loading • Impact on marine ecology of reduced salinities • Compromised water and sediment quality
• Discharge used ice (use seawater to melt the ice)	Discharge (potentially dirty) ice into the sea	
• Managing fish waste	Odour	• Nuisance to third parties • Attracting pests
• Refrigeration/chilling	Release of harmful gasses	• Air pollution • Third party Health and safety impacts
• General activities associated with the factory	Noise	• Nuisance to third parties
	Lighting	• Visual impacts • Impacts on biodiversity (i.e. birds, attracting insects).
Factory cleaning		
• Use cleaning chemicals to wash the factory and equipment (and bins)	Cleaning chemicals and wash water and (some) scales released into the sea (port)	• Environmental degradation and compromised water quality • Ecotoxicity impacts on marine communities
	Chemical spillage	• Soil pollution
Waste management		
• General waste management	Odour from waste bins and sumps	• Nuisance to third parties • Attracting pests
	Inappropriate storage, managing and disposal of waste	• Environmental degradation • Impact on marine ecology

Activity	Aspect	Potential Impact
		• Soil and water pollution • Visual impacts
• Sewage management	Other / off spec effluent ending in the sewage released into Municipal sewage system	• Environmental degradation • Groundwater and surface water pollution • Non-conformance to permit conditions
Use of chemicals		•
• Storage and use of chemicals for cleaning, cooling towers and at the workshop	Chemicals used on site (specifically hazardous chemicals (i.e. for cooling tower/workshop) spilling into the environment	• Environmental degradation • Impact on marine ecology • Soil pollution • Visual impacts
Operating the cooling tower		•
• Cooling tower water spray	Emissions to air	• Air pollution • Third party Health and safety impacts (Legionella)
• Bleed off cooling towers	Effluent release into sea (port)	• Environmental degradation • Impact on marine ecology
Pest control		
• Implement pest control measures (i.e. use of pesticides, bait stations, fly traps)	Release of pesticide into the sea during rain events	• Environmental degradation • Impact on marine ecology
	Impact other animals (i.e. cats and birds exposed to bait for rodents)	• Harm or killing of animals (other than targeted pests)
Workshop and maintenance activities and use of vehicles and machinery		
• Use of vehicles and machinery	Emissions from vehicles	• Air pollution • Third party Health and safety impacts
	Noise from vehicles and machinery	• Nuisance impact to third parties
• Hydrocarbon management	Oil/diesel spills from vehicles and machinery (i.e. cranes); and spills from	• Soil pollution • Environmental degradation

Activity	Aspect	Potential Impact
	oil drums loaded onto or off the vessels from the jetty.	• Impact on marine ecology
Employment		
• Employ ±425 people	Create jobs Develop skills	• Positive Socio-economic impacts
Site access and security management		
• Third parties accessing the site	Third parties exposed to dangerous activities, equipment, chemicals, etc.	• Injury to third parties
Resources use		
• Use of municipal (NamWater) water in the factories	Water wastage, leaking pipes / tabs, etc.	• Impact on water being a scarce resource
• Use of electricity	Electricity consumption	• Impact on resource
• Water abstraction from the sea	Seawater intake System	• Loss of species through impingement and entrainment

8. OVERALL ENVIRONMENTAL OBJECTIVES

The following overall environmental objectives have been set by Seagull & Merlus Cormorant:

- To comply with national legislation and standards for the protection of the environment;
- To ensure all relevant environmental permits are in place and comply with permit conditions;
- To comply with the EMS policies and objectives;
- To avoid / limit potential impacts on the environment from all land-based activities associated with the factory (and associated activities)
- To avoid / limit potential impacts on the marine environment through the discharge of effluents.
- To protect soils and groundwater resources through the implementation of measures for spill prevention and clean-up;
- To ensure the legal and appropriate management and disposal of general and hazardous waste, through the implementation of a strategy for the minimisation, recycling, management, temporary storage, and removal of waste;
- To minimise the potential for noise and light disturbance in surrounding areas;
- To avoid potential impacts on the safety of third parties through appropriate site access control and awareness creation;
- To develop, implement and manage monitoring systems to ensure good environmental performance in respect of: Resource use; effluent release and impact on the marine environment; and impacts on biodiversity;
- To prevent pollution and clean up if incidents occur;
- To support and encourage environmental awareness and responsibility amongst all employees and service providers;
- To provide appropriate environmental training for all employees and service providers;
- To keep key stakeholders informed of activities through appropriate communication; and
- To ensure compliance to the EMP.

9. MANAGEMENT AND MITIGATION MEASURES

This section (Table 3) provides management or mitigation measures to address potential environmental impacts that have been identified through the Seagull & Merlus Cormorant EMS and a review of the historic fish processing activities.

TABLE 3: MANAGEMENT AND MITIGATION MEASURES

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
A	**Fish processing**			
A1	• Cleaning of fish and descaling - wash water and cleaning chemicals released into the sea • Discharge used ice into the sea	Remove as much of the scales as possible for disposal at the Walvis Bay landfill site (limit volumes of scales ending up in the sea).	Fish processors	During descaling
A2		Use only non-hazardous, "food safe approved", biodegradable cleaning chemicals. Ensure correct dilution of chemicals.	Cleaning Team	Each wash
A3		Ensure the Permit from the MAWF, to the discharge wastewater and effluent into the sea, remains valid (i.e. renew before expiry).	Environmental Department (Env Dept.)	3 months prior to expiry date
A4		Comply with all permit conditions. (Amongst others, the quality of the effluent that is disposed of into the harbour shall not exceed the water quality of the receiving water body such as to affect the marine ecosystem).	General Manager (GM) / Env Dept.	Continuous
A5		Only discharge effluent into the sea as per the application submitted to the MAWF.	Env Dept.	Continuous
A6		Regularly monitor the effluent prior to discharge. See section 11.1.3.	Env Dept.	See Section 11.1.3 (and EMS monitoring procedure)

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
A7	Refrigeration/chilling – release of harmful gasses	Maintain the refrigeration equipment. Use Ammonia refrigeration.	Maintenance Dept.	Continuous
A8	General activities associated with the factory – noise and lighting	Ensure equipment is properly maintained and fitted with the necessary silencers and mufflers to avoid noise impact on residents and visitors.	Maintenance Dept.	Continuous
A9		Use yellow outdoor lights as far as possible (without compromising safety and other issues)	Maintenance Dept.	Continuous
B	**Factory cleaning**			
B1	Use cleaning chemicals to wash the factory and equipment (and bins) – released into the sea	Use only non-hazardous, “food safe approved”, biodegradable cleaning chemicals.	Cleaning Team	Each wash
B2		Refer to A2 to A6.		
C	**Waste management**			
C1	General waste management – odour, Inappropriate storage, managing and disposal	Apply the waste hierarchy in order of preference, i.e. waste avoidance, waste reuse, waste recycling or reclamation, waste treatment and waste disposal.	All employees / Env Dept.	Continuous
C2		Littering, burying or burning of waste on site is prohibited. Pick up all litter near the sea and dispose safely in appropriate containers for disposal at a licenced landfill facility. Control litter on an on-going basis.	Env Dept.	Continuous
C3		Continue to implement (and continuously improve) the Waste Management Plan (forming part of the EMS).	All employees / Env Dept.	Continuous

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
		Use relevant / labelled waste disposal bins and empty at appropriate intervals. Keep waste types separate (i.e. as a minimum: recyclable waste, hazardous waste, non-hazardous waste and medical waste).		
C4		Non-hazardous/non-recyclable waste shall be disposed of at the Walvis Bay Landfill site	Env Dept.	Continuous
C5		Hazardous waste shall be disposed of at the Walvis Bay Hazardous Waste site	Env Dept.	Continuous
C6		Medical waste shall be incinerated at the Walvis Bay Municipal facility.	Env Dept.	Continuous
C7		Keep records of compliant disposal of all waste.	Env Dept.	Continuous
C8		Conduct routine inspections of the companies transporting and disposing hazardous wastes on behalf of Seagull.	Env Dept.	Continuous
C9	Sewage management	Sewage will only be discharged to the municipal sewer.	Maintenance Dept.	Continuous
C10		Ensure the Permit to discharge effluent in the Municipal Sewer System remains valid (i.e. renew before expiry).	Env Dept.	3 months prior to expiry date
C11		Comply with all permit conditions.	General Manager (GM) / Env Dept.	Continuous
D	**Use of chemicals**			
D1	Storage and use of chemicals for cleaning, cooling towers and at the workshop – spills.	Chemicals will be stored securely in dedicated areas and handled and handled to prevent dispersion to the environment. Bunded areas will have capacity for 110% of the largest container stored. Appropriate containers will be used for storage and transport of hazardous substances	General Manager (GM) / Env Dept.	Continuous

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
D2		Material Safety Data Sheets (MSDS) will be readily available and employees are aware of their content.	Env Dept.	Continuous
D3		Conduct weekly inspections to check for leaks from storage tanks or containers.	Env Dept.	Weekly
D4		Ensure adequate signage at chemical storage areas.	Env Dept.	Continuous
D5		Hazardous chemicals will not be released into the environment or sewage system. These materials will be contained and disposed of as hazardous waste.	Env Dept.	Continuous
D6		Personnel dealing with hazardous substances will be appropriately trained.	Env Dept.	Continuous
D7		Chemical spills will be regarded as an environmental incident and reported through the incident reporting system.	All employees / Env Dept.	Continuous
E	**Operating the cooling tower**			
E1	Cooling tower water spray – emissions to air	Conduct ongoing cooling tower maintenance and cleaning.	Maintenance Dept.	Continuous (monthly cleaning).
E2		Ensure effective dosing of chemicals to prevent risk of *Legionella*.	Env Dept.	Monthly testing
E3	Bleed off cooling towers **–** release into sea	Refer to A2 to A6.		
E4		Conduct periodic analysis of the effluent stream.	Env Dept.	Continuous
E5		~~Investigate alternative options for disposal of the effluent.~~	~~Maintenance Dept~~	~~Once off~~
F	**Pest control**			
F1	Use of pest control measures – release to sea	The bait station must be designed to only catch rodents. Killing of other animals (i.e. reptiles, birds and mammals) is prohibited.	Env Dept.	Continuous

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
F2	and other animals exposed to bait.	Prevent stormwater (rainwater) getting into contact with bait stations and fly traps and washing pesticides to the sea.	Env Dept.	Continuous
G	**Workshop and maintenance activities and use of vehicles and machinery**			
G1	Use of vehicles and machinery – emissions and noise	All vehicles and machinery used will be properly maintained so as to reduce emissions and noise generation to a minimum	Maintenance Dept.	Continuous
G2	Hydrocarbon management – spills	Store hydrocarbons in lined and bunded areas and check tanks for leaks. Handel to prevent dispersion to the environment.	Env Dept.	Continuous
G3		Bunded areas will have capacity for 110% of the largest container stored.	Maintenance Dept.	Continuous
G4		Vehicles will be regularly serviced to reduce oil leaks. No servicing of vehicles on site.	Maintenance Dept.	Continuous
G5		Used hydrocarbons and hydrocarbon contaminated material will be kept in sealed containers and recycled or disposed of at the Walvis Bay hazardous waste site.	Env Dept.	Continuous
G6		A suitable spill kit will be available and at least one person trained in hazmat response will be on site at all times.	Env Dept.	Continuous
G7		All soils that have become contaminated with hydrocarbons will be bio-remediated or removed and managed as hazardous waste.	Env Dept.	Continuous
G8		Hydrocarbon spills will be regarded as an environmental incident and reported through the incident reporting system.	All employees / Env Dept.	Continuous
G9		Inspections at the jetty during offloading of oil drums.	Env Dept.	Continuous

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
H	**Employment**			
H1	Job creation and skills development	Give preference to locals when filling vacancies. Abide by the conditions stipulated in the Labour Act (No. 6 of 1992) and the Affirmative Action (Employment) Act No. 29 of 1998.	GM / HR Department	When employing new people
H2		Promote development of the workforce through training. Make programmes for skills development available to all workers.	HR Department	As per programme
H3		Implement mechanisms to promote local procurement and give preference to local service providers.	HR Department	Continuous
I	**Site access and security management**			
I1	Safety impacts to third parties accessing the site	Strict access control is maintained and no visitors are allowed on site without the permission. Visitors to sign company "Code of Conduct"	Security Team	Continuous
I2		Security and safety personnel will manage access to the site. Third parties and/or animals found in potentially risky situations will be managed by the relevant Seagull personnel.	GM / Security Team	Continuous
J	**Resources use**			
J1	Use of municipal (NamWater) water in the factories – wastage	Ensure that the 'reduce, reuse and recycle' philosophy is applied as far as practicable to minimise wastage of water resources.	All employees / Env Dept.	Continuous
J2		Ensure ongoing preventative maintenance of leaking pipes and control of leaking taps.	Maintenance Dept.	
J3		Maintain and implement water awareness programme for employees and contractors.	Env Dept.	As per programme

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
J4		Close running taps not in use.	All employees	Continuous
J5	Electricity consumption	Use LED lights (as far as practicable).	Maintenance Dept.	
J6		Switch off lights / machinery not in use.	All employees	Continuous
J7		Investigate further electricity consumption measures and implement where possible.	Env Dept.	As per programme
J8	Seawater abstraction	Keep intake velocities as low as possible. Ensure installation of screens on the end of the intake pipe, or the use of a screen box or shroud. Abstraction of maximum 10 m3 / day (comply with permit conditions). Keep in the intake as far as practically possible from the discharge point.	Env Dept.	Continuous
K	**Organisational framework and environmental awareness and communication**			
K1	ISO 14001 EMS	Incorporate commitments from this EMP into the EMS and continue to improve the system, in line with the ISO 14001 requirements	Env Dept.	Continuous
K2	Training and awareness	All employees (and contractors) will be inducted prior to commencing work and sign acknowledgement of the induction / awareness training. Include key issues from this EMP and the EMS into the induction to ensure that all workers are trained in good environmental practices. This will ensure that all persons working at the factory are: • aware of the environmental sensitivities of the site and activities; • informed of the potential impacts and the causes thereof; • aware of the objectives of the EMP and the EMS Policy;	Env Dept.	Inductions / training programme

Item	Activity / Aspect	Management, mitigation and monitoring actions	Implementation programme	
			Responsibility	Frequency
		• and the consequences of their individual actions.		
K3		Contract or job-specific training will be provided to those contractors or personnel involved in activities for which risk assessment has identified as having high environmental risk.	Env Dept.	As per training programme
K4		All employees shall be familiar with the emergency response plans and trained in emergency response through regular drills.	Env Dept.	As per training programme
K5	Communication	Maintain and update the stakeholder register.	Env Dept.	Annually
K6		Continue to implement the EMS Communication Procedure to monitor relations with stakeholders, record grievances and partnerships, keep regular contact with key stakeholder groups.	Env Dept.	Continuous
K7		Keep a register of public complaints, address and follow up complaints (promptly) and give feedback to relevant members of the public.	Env Dept.	Continuous
L	**Emergency prevention, planning, and response**			
L1	Environmental Emergencies	Ensure the Seagull Emergency response Procedure covers environmental risk, including significant hydrocarbon and chemical spills; site evacuation procedure; fire; third party injuries; effluent pipe burst; etc.	Env Dept.	Continuous

10. ROLES AND RESPONSIBILITIES

It is the responsibility of Seagull & Merlus Cormorant to implement the EMP and to make sure that all the actions are carried out. The successful implementation of the EMP is however dependent on clearly defined roles and responsibilities for each of the management actions given (also see section 9 for responsibilities).

a. SEAGULL & MERLUS CORMORANT GENERAL MANAGER

The General Manager of Seagull & Merlus Cormorant has overall responsibility for environmental management at the fish factories and for ensuring this EMP is implemented.

To assist the General Manager, Seagull & Merlus Cormorant has an Environmental Department (i.e. Environmental Officer) that is dedicated to managing and monitoring the environmental issues associated with the fish factories activities.

b. ENVIRONMENTAL DEPARTMENT

The Environmental Manager and or Environmental Officer are responsible for assisting the General Manager and various other managers in all environmental and community issues, and specifically to ensure that the commitments as set out in this EMP and the Seagull & Merlus Cormorant EMS are implemented.

In addition to the above, the Environmental Manager is responsible for ensuring that all persons involved with the fish processing and associated activities at the factories comply with this EMP.

The Environmental Department will be responsible for the following aspects related to compliance of this EMP:

- Regular inspections and auditing compliance to this EMP and any other relevant legal requirements e.g. permits and authorisations.
- Conduct environmental awareness training during induction training and on an ad hoc basis thereafter.
- Conduct scheduled monitoring as outlined in section 11 as well as any additional monitoring required by permit and authorisations issued to Seagull & Merlus Cormorant by relevant authorities.
- Ensure compliance to this EMP and permits and authorisations issued to Seagull & Merlus Cormorant by relevant authorities.

c. SUPPLIERS / CONTRACTORS

All suppliers / contractors and employees will be contractually required to comply with the relevant commitments in this EMP.

d. EXTERNAL SPECIALISTS

Seagull & Merlus Cormorant may appoint external environmental specialists, as and when required, to assist with the implementation of certain commitments made in the various management plans. An independent auditor will also assess compliance against the EMP on an annual basis.

11. MONITORING AND REPORTING REQUIREMENTS

This section provides the mechanisms for monitoring compliance with the EMP and reporting on it.

a. MONITORING

11.1.1 WATER USE

Electronically monitor the water consumption and keep record of monthly water consumption.

11.1.2 ELECTRICITY CONSUMPTION

Monitor electricity consumption and keep record of monthly consumption.

11.1.3 EFFLUENT DISCHARGE TO THE SEA

Conducted monitoring as per the permit conditions. Monthly analysis of the effluent stream (combined effluent released to the sea) and receiving seawater must be undertaken (also to monitor the conditions in the corner of the jetty where the intake location is proposed). The seawater (background levels) should be monitored some distance away from Seagull's discharge point (as well as any other discharges from nearby factories or vessels) to obtain proper background levels.

It is further recommended that Seagull & Merlus Cormorant liaise with other fishing Companies in the Port (and NamPort) to conduct a joined Marine Ecology monitoring programme to determine the cumulative impacts from all fish factories' operations.

11.1.4 SEWAGE DISCHARGE TO THE MUNICIPAL SEWER

Annually analyse the sewage released to the municipal sewer system.
Monitor the fish

11.1.5 WASTE MANAGEMENT

Monitor the effectiveness of the Waste Management Plan through weekly site inspections and continually improve the plan as and where required.

11.1.6 SEAWATER ABSTRACTION

Monitor the quality of the abstracted seawater continuously to ensure no pollutants are present that may affect product quality.
Monitor the abstraction volumes.
Comply with permit conditions.

b. REPORTING

Other than the reporting requirements stipulated in their EMS procedures, it is recommended that Seagull & Merlus Cormorant compiles annual Environmental Performance reports. The objective of these reports would be to summarise the performance of their management and various commitments to the EMS, various permits, and this EMP.

The report should be submitted to the MEFT and to the NamPort Environmental Department for their information.

12. CONCLUSION

This EMP was developed for Seagull & Merlus Cormorant fish processing activities at their fish factories. Seagull & Merlus Cormorant have implemented an Environmental Management System, which is ISO 14001 certified.

Section 9 of this EMP documents the environmental management and mitigation measures. By successfully implementing the commitments in this EMP (in conjunction with Seagull & Merlus Cormorant's EMS), potential impacts to the environment, associated with Seagull & Merlus Cormorant's activities, can (pro-actively) be avoided or minimised.

APPENDIX A – SEAGULL & MERLUS CORMORANT ENVIRONMENTAL POLICY

Seagull Fish Processors (Pty) Ltd

SEAGULL FISH PROCESSORS

CORPORATE POLICY

Seagull Fish Processors (Pty) Ltd is a fish processing Namibian company. The company is processing and packing fresh and frozen fish products. The goal of top management of Seagull Fish Processors is to be an honest socially responsible, transparent and long-term producer of safe, legal and authentic quality fresh and frozen fish products.

To accomplish this Abroma Fishing Industries:

Has documented, implemented, maintained and managed systems to meet the following:

- Legal, customer and other requirements/ specifications
- Produce products that are safe and of a specified quality (BRC & IFS)
- Maintain healthy and safe work conditions and want to prevent injury and sickness
- Have a security guard force to protect the company's employees, property, products and continued production from sabotage, loss, damage, injury, or interruption.
- Operations at Seagull Fish Processors includes a commitment to the protection of the environment which includes prevention of pollution. (ISO 14001)
- Specific objectives and targets are set and displayed monthly on the notice boards.
- The targets are monitored, measured and managed
- Commits to continual improvement in performance of all systems
- Commits to provide training to ensure communication of this policy and all systems throughout the company
- Makes sure that this policy is available to all interested parties including the public and share holders
- Will have management reviews of this policy, objectives and targets and all systems to make sure these are still fulfilling the purpose
- Top management will provide necessary resources – including financial and human resources for continual improvement of the above-mentioned systems.

Signed by:

Managing Director:
Jose Lloves

Date: 17/02/21

DOCUMENT NUMBER:	N4-SD-00-P01-16	COMPILED BY: T. NELIWA	MANUAL NUMBER	1 of 1
AUTHORISED BY				
AMENDED DATE:	05.02.2021	EFFECTIVE DATE:	08.05.2012	

CORPORATE POLICY

Merlus Cormorant Fishing (Pty) Ltd is a fish processing Namibian company. The company is processing and packing frozen fish products. The goal of top management of Merlus Cormorant Fishing is to be an honest socially.

responsible, transparent, and long-term producer of safe, legal, and authentic quality and frozen fish products.

To accomplish this Merlus Cormorant Fishing:

Has documented, implemented, maintained, and managed systems to meet the following:

- Legal, customer and other requirements/ specifications
- Produce products that are safe and of a specified quality (BRC & IFS)
- Maintain healthy and safe work conditions and want to prevent injury and sickness
- Having a security guard force to protect the company's employees, property, products and continued production from sabotage, loss, damage, injury, or interruption.
- Operations at Seagull Fish Processors includes a commitment to the protection of the environment which includes prevention of pollution. (ISO 14001)
- Specific objectives and targets are set and displayed monthly on the notice boards.
- The targets are monitored, measured, and managed
- Commits to continual improvement in performance of all systems
- Commits to provide training to ensure communication of this policy and all systems throughout the company
- Commits to continuously improve the company's Food Safety and Quality Culture
- Makes sure that this policy is available to all interested parties including the public and share holders
- Will have management reviews of this policy, objectives and targets and all systems to make sure these are still fulfilling the purpose
- Top management will provide necessary resources – including financial and human resources for continual improvement of the above-mentioned systems.

Signed by:

_____ _____

Managing Director: Date:

Jose Lloves