

Cape Environmental Assessment Practitioners (Pty) Ltd

Reg. No. 2008/004627/07

Telephone: (044) 874 0365 Facsimile: (044) 874 0432 Web: www.cape-eaprac.co.za 1st Floor Eagles View Building 5 Progress Street, George PO Box 2070, George 6530

COASTAL WATERS DISCHARGE PERMIT APPLICATION FORM

For

SEAVUNA FISHING CO (PTY) LTD

In terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended & National Environmental Management:Integrated Coastal Management Act, 2008 (Act 24 of 2008)



Prepared for Applicant: SeaVuna Fishing Co (Pty) Ltd

<u>By:</u> Cape EAPrac

<u>Report Reference:</u> MOS373/03

<u>Date:</u> 29 May 2015

APPOINTED ENVIRONMENTAL ASSESSMENT PRACTITIONER:

Cape EAPrac Environmental Assessment Practitioners

PO Box 2070

George

6530

Tel: 044-874 0365

Fax: 044-874 0432

Report written & compiled by: **Melissa Mackay** (BTech & ND Nature Conservation), who has eight years' experience as an environmental practitioner.

PURPOSE OF THIS REPORT:

Application for Coastal Waters Discharge Permit

APPLICANT:

SeaVuna Fishing Co (Pty) Ltd

CAPE EAPRAC REFERENCE NO:

MOS373/03

SUBMISSION DATE

29 May 2015

COASTAL WATERS DISCHARGE PERMIT APPLICATION FORM

in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended & National Environmental Management:Integrated Coastal Management Act, 2008 (Act 24 of 2008)

SeaVuna Fishing Co (Pty) Ltd

Mossel Bay Harbour

Submitted for:

Stakeholder Review & Comment

- This report is the property of the Author/Company, who may publish it, in whole, provided that:
- Written approval is obtained from the Author and that *Cape EAPrac* is acknowledged in the publication;
- Cape EAPrac is indemnified against any claim for damages that may result from any
 publication of specifications, recommendations or statements that is not administered or
 controlled by Cape EAPrac;
- The contents of this report, including specialist/consultant reports, may not be used for purposes of sale or publicity or advertisement without the prior written approval of *Cape EAPrac*:
- Cape EAPrac accepts no responsibility by the Applicant/Client for failure to follow or comply with the recommended programme, specifications or recommendations contained in this report;
- Cape EAPrac accepts no responsibility for deviation or non-compliance of any specifications or recommendations made by specialists or consultants whose input/reports are used to inform this report; and
- All figures, plates and diagrams are copyrighted and may not be reproduced by any means, in any form, in part or whole without prior written approved from *Cape EAPrac*.

Report Issued by:

Cape Environmental Assessment Practitioners

 Tel:
 044 874 0365
 PO Box 2070

 Fax:
 044 874 0432
 5 Progress Street

 Web:
 www.cape-eaprac.co.za
 George 6530

Cape *EAP*rac CWDP Application Form

ORDER OF REPORT

CWDP Application Form

Declaration Form

Appendix A : Reporting

Annexure A1 : Water Quality Monitoring Report 2013

Annexure A2 : Water Quality Results

Appendix B : Public Participation

Annexure B1 : Registered I&AP list

Annexure B2 : Comments & Responses Report

Annexure B3 : Adverts & Site Notices

Annexure B4 : Comments received

Appendix C : Municipal effluent disposal permit

Appendix D : Waste Management Plan

Appendix E : DWS comment on Water Use Registration

Cape *EAP*rac CWDP Application Form

TABLE OF CONTENTS

1	INTRODUCTIONI
	1.1 BACKGROUNDI
	1.2 STUDY SITEII
2	MONITORINGIV
	GENERAL INSTRUCTIONS1
	SPECIFIC INSTRUCTIONS3
	SECTION A: APPLICANT INFORMATION (PRIVATE)4
	SECTION B: APPLICANT INFORMATION (CONSULTANT)5
	SECTION C: APPLICANT INFORMATION (ORGAN OF STATE OR
	PARASTAL)5
	SECTION D: EFFLUENT GENERATION6
	SECTION E: ALTERNATIVES AND RATIONALE FOR THE DISCHARGE OF EFFLUENT8
	SECTION F: PUBLIC PARTICIPATION PROCESS9
	SECTION G: SITE CHARACTERISATION10
	SECTION H: EFFLUENT CHARACTERISATION14
	SECTION I: COMPLIANCE MONITORING AND REPORTING17
	SECTION J: CONTINGENCY AND DECOMMISSIONING PLANNING19

SECTION K: SPECIALIST TECHNICAL AND ENGINEERING
REQUIREMENTS19
DECLARATION21
FIGURES
Figure 1: Mossel Bay harbour with SeaVuna Fishing (Google Earth Pro, 2015)ii
Figure 2: SeaVuna Fishing discharge and abstraction points (Google Earth Pro, 2015) iii
Figure 3: Discharge & abstraction pipelines (Google Earth Pro 2015) 8
Figure 4: Location plan12
Figure 5: CSIR Monitoring Stations
Figure 6: Discharge and abstraction pipelines19
PHOTOGRAPHS
Photo 1: Discharge pipe is located at the stepsiii
Photo 2: Harbour dischargeiii
Photo 3: Abstraction point approx. 7m eastiv
Photo 4: Abstraction pipesiv
Photo 5: Offloading area for emptying of the bins
Photo 6: Conveyor belts with mesh and bund walls for draining water 7
Photo 7: Plastic bins with solid waste for fishmeal plant
Photo 8: The mesh screen filtering discharge water from the offloading and processing activities

1 INTRODUCTION

Cape Environmental Assessment Practitioners (Cape EAPrac) has been appointed by the applicant SeaVuna Fishing Company (Pty) Ltd to complete and submit a Coastal Waters Discharge Permit (CWDP) as required in terms of the National Environmental Management: Integrated Coastal Management Act (NEM:ICMA, Act 24 of 2008). The NEM:ICMA makes provision for the permitting for the discharge of any waste water into the South African coastal waters.

Prior to the NEM:ICMA coming into effect, the disposal of land-derived effluent into the coastal environment through pipelines was controlled and regulated by the then Department of Water Affairs (DWA) under the National Water Act (Act 36 of 1998). With the NEM:ICMA, these regulations are now under the mandate of the Department of Environmental Affairs (DEA) directorate Oceans & Coasts. It must be noted that SeaVuna submitted an application for Water Use Registration in terms of the NWA in January 2010 and were notified by the DWA that the marine environment did not constitute a water resource and as such no Registration was required. See Appendix E.

Any water containing waste (defined as effluent in terms of the NEM:ICMA) that is disposed of into coastal waters will require a permit or general authorisation.

Effluent is defined as "any liquid discharged into the coastal environment as waste, and includes any substance dissolved or suspended in the liquid, or liquid which is a different temperature from the body of water into which it is being discharged".

The thresholds and criteria for substances specific to the NEM:ICMA are currently being workshopped and have not yet been gazetted, thus the criteria and parameters identified in the South African Water Quality Guidelines developed by the DWA are being applied in most cases.

Coastal waters are defined as "any marine waters that form part of the internal waters or territorial waters or estuary of the Republic of South Africa, as defined in the Maritime Zones Act (Act 15 of 1994) and the NEM:ICMA".

According to DEA, harbours are also considered to be coastal waters and as such all facilities that discharge into the harbours are required to complete and submit a CWDP to the DEA.

1.1 BACKGROUND

SeaVuna Fishing Company (Pty) Ltd is fishing and processing facility located in the Mossel Bay harbour. The company was registered in 1983 and the facility commenced under the auspices of SeaVuna in the harbour in 1990. The premises were previously used by other operators in the

Cape *EAP*rac i CWDP Application Form

fishing industry. SeaVuna forms part of the Sea Harvest group originally established in Saldanha Bay in 1964.

The main species targeted is *Merluccius Capensis* and *Merluccius Paradoxus*, commonly known as Cape Capensis or Cape Hake. SeaVuna trawls and processes approximately 4000 – 5000 tons (wet weight) of hake per year. The solid waste generated from the catch is skin and bone which is used for fishmeal.

1.2 STUDY SITE

The SeaVuna facility is located on Quay 5 of the Mossel Bay Harbour in the Southern Cape. The facility has a long term lease agreement with the National Ports Authority (NPA) for the use of the property for the purposes of offloading and processing hake and some by-catch.



Figure 1: Mossel Bay harbour with SeaVuna Fishing (Google Earth Pro, 2015)

Trawlers load up with ice and bins into which the fish are packed at sea. The fish are gutted and headed at sea. These are offloaded in bins at the facility. The bins are conveyed into the processing area where the fish are processed for packaging. The discharge is mostly melted ice water from the boat holds which contains minimal protein solids and sea water which is used for washing fish prior to packing. The discharge point is adjacent to the docking bays (SF Discharge 1) and the abstraction point is located approximately 7m to the east (SF Abstraction).

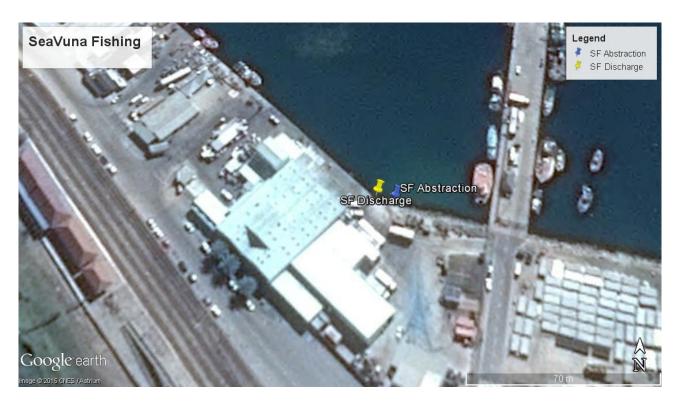


Figure 2: SeaVuna Fishing discharge and abstraction points (Google Earth Pro, 2015)

The main discharge pipeline is approximately 16m in length and is located in the quay surface before exiting into the harbour below the water level. The discharge contains melted ice, sea water and some protein solids.



Photo 1: Discharge pipe is located at the steps

Photo 2: Harbour discharge

Sea water for use in the factory is abstracted from the harbour immediately adjacent to the docking bays (approximately 7m east). This water is routinely monitored to ensure that it complies with food safety standards.



Photo 3: Abstraction point approx. 7m east

Photo 4: Abstraction pipes

2 MONITORING

Transnet National Ports Authority of South Africa has commissioned Long-Term Ecological Monitoring Programmes for seven of the eight ports that it operates along the South African coastline. The purpose of the monitoring programme is to track long-term changes in environmental quality in the ports, to determine what management action (if any) is required to improve environmental quality, and to provide a yardstick against which to evaluate the success of management action that may be implemented to improve environmental quality.

The monitoring programme sampling design for each port was originally developed by the South African Environmental Observation Network (SAEON, Elwandle Node). The monitoring programme comprises bi-annual (summer and winter surveys), which differ in the scope of the physical, chemical and biological parameters and media monitored. The summer survey focuses on water quality while the winter survey focuses on water quality, sediment quality, benthic macrofauna community composition and structure, and bioaccumulation of contaminants by mussels.

Water quality in and near the Port of Mossel Bay during the 2013 summer survey was good, and was by some way the best for any port surveyed in the summer of 2013. The most significant impairment was due to elevated faecal indicator bacteria counts at one station in the port. If not for these high bacteria counts then water quality at this station would have been considered excellent.

Anomalies for pH and dissolved oxygen at two stations, and ammonia concentrations that were high relative to other nutrients imply some anthropogenic impairment of water quality in the port. However, the magnitude of impairment was minimal and does not change the conclusion regarding the water quality classification. The station closest to SeaVuna Fishing was classified as good and had no anomalies.

In addition, SeaVuna Fishing conducts onsite monitoring of the abstraction water as part of the Hazard analysis and critical control points (HACCP) requirements to ensure that no contaminants are introduced to foodstuffs (hake in this case) for human consumption. Compliance with Health and Safety Regulations and Food Safety protocols remains a priority and Food Safety Management Systems and the Hazard Analysis Procedures have been implemented. These protocols are designed to ensure that the product is of a high standard and complies with the necessary requirements for consumables.



GENERIC APPLICATION FORM FOR A COASTAL WATERS DISCHARGE PERMIT IN TERMS OF SECTION 69 OF THE INTEGRATED COASTAL MANAGEMENT (ICM) ACT, (ACT NO. 24 OF 2008) effective from <u>01 August 2014</u>

GENERAL INSTRUCTIONS

- i. All relevant sections of this Application Form **must** be completed in full.
- ii. If an item is "not applicable", please indicate "*N/A*". The use of "not applicable" in the Application Form must be done with circumspection.
- iii. Failure to fully complete all required parts of this application form or pay necessary Application Fees (if required) will result in the application being returned.
- iv. This Application Form **must** be completed and signed by the applicant. If the application is completed by a third party (such as a consultant or legal representative), the third party's details must further be included.
- v. All details of previous approved licenses such as the reference number (s) and the dates of issue as well as expiration dates must be provided.
- vi. This Application Form is current as of <u>1 August 2014</u>. It is the responsibility of the Applicant to ascertain whether subsequent versions of the Application Form have been published or produced by the Department. Note that this Application Form replaces all the previous versions. This updated Application Form must be used.
- vii. One hard copy and one electronic copy (CD/DVD/ via E-mail) of this form must be submitted.
- viii. The required information must be typed within the spaces provided. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The space provided extend as each space is filled with typing. A legible font type and size must be used when completing the form. The font size should not be smaller than 10pt (e.g. Arial Narrow). A digital copy of the Application Form is available on request.
- ix. No faxed or e-mailed applications will be accepted.

x. Unless protected by law, all information contained in and attached to this Application Form will become public information on receipt by the Department. Upon request, any Interested and Affected Party should be provided with the information contained in and attached to this Application Form.

- xi. This Application Form must be submitted to the Department at the postal or physical address given below. Unnecessary delays will be incurred should the application and attached information not be submitted to the correct address.
- xii. This Application Form, with all applicable documents **must** be addressed and sent to the Department of Environmental Affairs: Branch Oceans and Coasts to the **Director: Coastal Pollution Management** to:

2nd Floor, East Pier Building, East Pier Road, V & A Waterfront, Cape Town *or* P.O. Box 52126, V & A Waterfront, 8002

Electronic submissions may also be sent to: cwdp@environment.gov.za

- xiii. The proof of payment of the application fee must be attached to this application.
- xiv. A copy of this application must be kept for the applicant's record.
- xv. The Department's "Draft Generic Assessment Criteria" must be consulted for guidance on how the generic assessment criteria will be used to evaluate your application.
- xvi. The Department's "Guideline on public participation requirements for Coastal Waters

 Discharge Permit Application under section 69 of the National Environmental Management

 Act: Integrated Coastal Management Act 2008 (Act no.24 of 2008)" must be consulted for guidance when conducting public participation for a CWDP.
- xvii. For information or enquiries, please contact the following officials:
 - Mr M. Tshikotshi on 021 819 2455 or via E-mail mtshikot@environment.gov.za
 - Ms N. Baijnath-Pillay on 021 819 2409 or via E-mail nbpillay@environment.gov.za

SPECIFIC INSTRUCTIONS

Who must apply for a Coastal Waters Discharge Permit (CWDP)?

Anyone who discharges or intends to discharge land-derived effluent into the coastal waters of South Africa must apply for a CWDP.

Section 69 (1) of the ICM Act states:

"No person may discharge effluent that originates from a source on land into coastal waters except in terms of a general authorisation ... or a coastal waters discharge permit ..."

Under the ICM Act, "effluent" is defined as:

- (a) Any liquid discharged into the coastal environment as waste, and includes any substance dissolved or suspended in the liquid; or
- (b) Liquid which is a different temperature from the body of water into which it is being discharged.

"Waste" is similarly defined in the ICM Act as:

- "... any substance, whether or not that substance can be re-used, recycled or recovered -
 - (i) that is surplus, unwanted, rejected, discharged, abandoned or disposed of;
 - (ii) that the generator has no further use of, for the purposes of production, reprocessing or consumption; and
 - (iii) that is discharged or deposited in a manner that may detrimentally impact on the environment."

Sections A, B, and C

- I. Section A: To be completed by a private entity.
- II. Section B: To be completed by a consultant and acting on behalf of the applicant.
- III. Section C: To be completed by organ of state or operating as a parastatal.
- Complete all relevant fields.
- If you are a private individual and have been contracted as a service provider for the purposes of
 environmental authorisations and monitoring, please complete sections A and B respectively.
- If you are representing an organ of state/government/parastatal and have contracted a service provider for the purposes of environmental authorisations and monitoring, please complete sections B and C respectively.

Application Information

i.

Existing discharge:	✓
New Application:	
Renewal Application:	
Revision/Amendment of Existing CWDP Permit:	

ii. Discharge into which of the following receiving environments:

Offshore:	
Surf Zone: (Harbour)	✓
Estuary:	

(For estuary discharges, applications will be processed in consultation with the relevant Department of Water Affairs Office)

SECTION A: APPLICANT INFORMATION (PRIVATE)

Company trading name (if any):	SeaVuna Fishing Co (Pty) Ltd			
Registration no:	1983/000674/07			
Contact person:	Mr J.J. Maritz			
Physical address:	Mossel Bay Harbour PO Box 147, Mossel Bay			
Postal address:				
Postal code:	6500			
Telephone:	044 691 2814	Cell:	082 561 9848	
E-mail:	kobusm@seaharvest.co.za	Fax:	044 691 3163	
Website:	http://www.seaharvest.co.za/			

If the applicant is an individual please provide South African identification number or alternatively provide a valid Passport Number

The applicant is a company.

Pipeline owner:	SeaVuna Fishing Co (Pty) Ltd				
Contact person:	Mr J.J. Maritz				
Postal address:	PO Box 147, Mossel Bay				
Postal code:	6500				
Telephone:	044 691 2814	Cell:	082 561 9848		
E-mail:	kobusm@seaharvest.co.za	Fax:	044 691 3163		
Website:	http://www.seaharvest.co.za/				

NB: If another company also discharges via this outfall, kindly attach a list of details as requested in all sections of this application form for any such company.

SECTION B: APPLICANT INFORMATION (CONSULTANT)

Consultancy	Cape Environmental Assessment Practitioners			
Trading Name:	Cape EAPrac			
Registration no:	2008/004627/07			
Consultant's name:	Itant's name: Ms Melissa Mackay			
Designation:	Senior Consultant			
Physical address:	First Floor, Eagles View Building	et, George		
Postal address:	PO Box 2070, George			
Postal code:	6530			
Telephone:	(044) 874 0365 Cell:		071 603 4132	
E-mail:	mel@cape-eaprac.co.za	Fax:	(044) 874 0432	
Website:	www.cape-eaprac.co.za			

SECTION C: APPLICANT INFORMATION (ORGAN OF STATE OR PARASTAL)

4.	Name of District or Local Authority:
2.	Department:
3.	-Directorate / Section:

L			
4. Primary Contact Officia	l:		
Name & Surname:			
Designation/Rank:			
Physical address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	
Website:			
5. Secondary Contact offi	icial:		
Name & Surname:			
Designation/Rank:			
Physical address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	
Website:			
S	ECTION D: EFF	FLUENT GENERA	ATION
1 Provide a brief descri	intian of the offluent disch	orga process that recults in	the effluent being generated

SeaVuna Fishing CWDP

 Provide a brief description of the effluent discharge process that results in the effluent being generated, together with the products, by products and other waste per month. Attach an effluent flow chart

Trawling vessels owned by SeaVuna Fishing trawl for hake which are kept on ice on board until they are able to offload at the facility in the Mossel Bay Harbour. The fish are brought on board, gutted at sea and placed in the plastic bins with ice and ice water. Once the vessels return to the harbour the fish and ice / ice water are brought ashore. The bins are offloaded onto the conveyor belts with meshes for draining off the water / ice. The fish are processed at the factory (filleted etc.) or kept whole and packaged for sale. The discharge water mainly comprises of melted ice water, sea water used for cleaning in the facility and some protein solids smaller than the mesh screens.

No contaminants, chemicals or any other materials other than water and a small quantity of organic fish matter is returned to the harbour.

The protein solids drained from the offloading and processing are collected in bins which are transported to the local fishmeal plant.

MOS373/03



Photo 5: Offloading area for emptying of the bins

Photo 6: Conveyor belts with mesh and bund walls for draining water



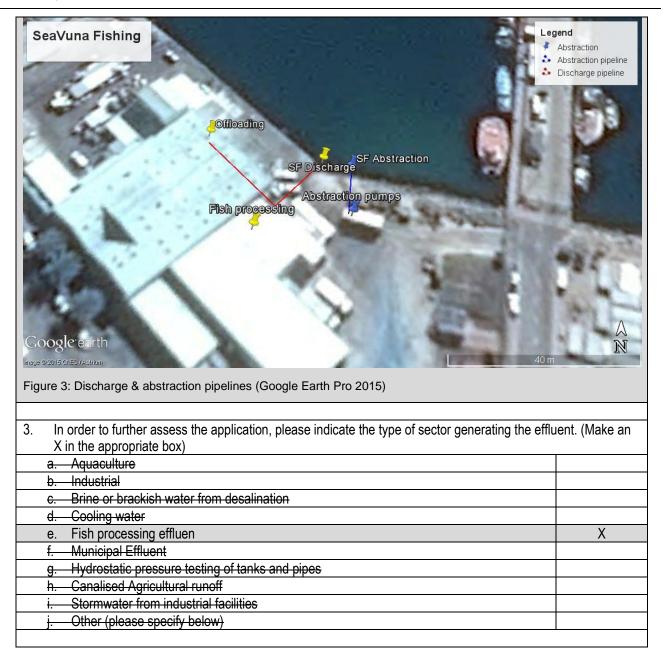
Photo 7: Plastic bins with solid waste for fishmeal plant

Photo 8: The mesh screen filtering discharge water from the offloading and processing activities

2. Describe the location of the waste generation points as within the facility, the route to the coast, the discharge point and the structures associated with the activity en route to the discharge point.

The 1st waste generation point is immediately on the quay where product is offloaded onto the conveyor belts. From this same point, the water is screened and drained toward the discharge point screen over a distance of approximately 24m. The primary screen removes proteins from both offloading and the 2nd waste generation point (the processing floor) before the discharge point approximately 16m NNE to the harbour.

An adjacent pipe (±7m east of the discharge) abstracts sea water for use in the factory for cleaning purposes.



NB: For municipal effluent proposed for coastal discharge, an evaluation in terms of the Water Services Development Plan, in terms of the Water Services Act (Act No. 108 of 1997), must be submitted with regard to water management for the Municipality

SECTION E: ALTERNATIVES AND RATIONALE FOR THE DISCHARGE OF EFFLUENT

1.	Do alternatives exist other than to discharge the effluent into the coastal environment?	YES	NO
2.	If alternatives to discharge exist, please provide details:		

3. If not, provide a strong motivation for the need and desirability of the effluent discharge into the coastal environment, noting the need to consider the best practicable environmental option for the site:

The discharge is made up ice, ice water, sea water and organic fish matter that is smaller than the 1mm mesh screens. There are no contaminants, chemicals or other pollutants that may cause environmental degradation. The use of sea water to minimise use of potable municipal water is also an important aspect relating to the discharge in that sea water cannot be discharged on land or into the sewage system. The discharge into the harbour is thus the best practicable solution and does not negatively affect the environment. In addition, sea water may not be discharged into the municipal sewer system.

4. Provide details of measures that are/will be made for effluent avoidance/prevention, waste minimisation, recycling, etc.

The 1st waste generation point related to the discharge is the offloading of the fish into the factory which is pretreated by means of meshes in the conveyor belts. This then goes through the primary screen along with water from the processing floor.

SeaVuna has a Waste Management Plan in place for the entire operation in order to minimise waste. The Plan is include as Appendix D of this report.

ш			
Ī	5. Has any of the activities in the Listing Notices of the Environmental Impact Assessment	YES	NO
	Regulations (2010), in terms of Chapter 5 of the National Environmental Management		
	Act, 1998 (Act No. 107 of 1998), been triggered that will result in the discharge to the		
	coastal environment?		
ĺ	6. If YES, has the abovementioned assessment been conducted?	YES	OH

NOTE: that a public participation process is required before a CWDP may be authorised. If the answer to question 6 is "NO," please be informed that the CWDP Reference Number as well as the associated documentation pertaining to this application may be used in the public participation process for an Environmental Authorisation to avoid duplication of such a process.

7.	Environmental Authorisation Reference Number (if YES):	(if YES): Not applicable		
(A	ttach approved Environmental Authorisation)			
8.	Date of commencement of pipeline operation	encement of pipeline operation At the date of commencem facility - 1983		it of the
9.	9. Is an Environmental Authorisation in progress?		YES	NO

SECTION F: PUBLIC PARTICIPATION PROCESS

NOTE: No Public Participation may commence without a CWDP reference number issued by the Department, where clarity will be given on the extent of the public participation required.

NOTE: The Applicant must take into account the Department's "Guideline on public participation requirements for Coastal Waters Discharge Permit Application under section 69 of the National Environmental

Management Act: Integrated Coastal Management Act 2008 (Act no.24 of 2008)" when conducting public participation for a CWDP.

SECTION G: SITE CHARACTERISATION

1. It	is required by the applicant to attach to this application:	
1.1.	A detailed site map and aerial photograph indicating the following:	
i.	Point(s) of discharge	X
ii.	Location where effluent is generated on land	Х
iii.	Effluent monitoring points	Х
iv.	An indication of whether any diffusers have been connected to the pipeline.	
None.		
1.2.	The total length of the pipeline (from the high water mark to the point of discharge):	
SF Disc	charge - The discharge pipeline has a total length of ±55m. It starts at the offloading area rui	ns parallel with
the qua	y and exits the building at approximately 1.5m above the high water mark before entering the	harbour below
the wat	er level.	
1.3.	The shortest straight line distance from the high water mark to the discharge point:	
Approxi	mately 0.2m.	
1.4.	The depth of the discharge point (i.e. the depth at the end of the pipeline):	
Approxi	mately 0.2m below the high water mark.	
1.5.	The Erf No:	
	ility is located on Quay 5 of the Mossel Bay harbour. The erf number for the entire harbour is	Erf 12459 (SG
21 digit	: C05100070001245900000)	

(Attach relevant supporting documents to this application form)

- 2. Complete the following mandatory fields: (Use either Decimal Degrees or Degrees Minutes and Seconds)
 - 2.1. Co ordinates for point/s of discharge (end of pipeline in coastal environment):

1	34°10'46.91"S 22° 8'47.52"E
2.2. The GPS co-o	rdinates of the point where the coastal outfall pipeline crosses the high water mark:
1	34°10'46.91"S 22° 8'47.52"E
2.3. Co-ordinates for	or plant/generator of land derived effluent (terrestrial):
Offloading Scree	en 34°10'46.67"S 22° 8'46.41"E
Primary Screen	34°10'47.30"S 22° 8'47.09"E
Fish packaging	34°10'47.50"S 22° 8'46.90"E

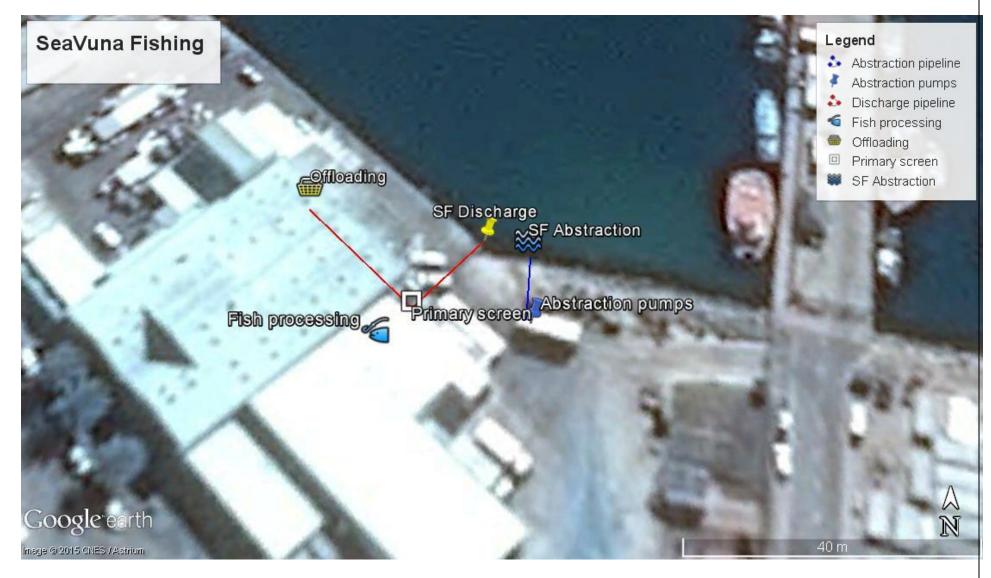


Figure 4: Location plan



Figure 5: CSIR Monitoring Stations

SECTION H: EFFLUENT CHARACTERISATION

1. Complete the following information (refer to the Annex for guidance on completing this section):

Please see <u>Annexure A2</u> for the results of the abstracted seawater for July 2014 and not that discharged, however given the proximity of the discharge point to the abstraction point it is noticeable that the seawater is considered to be within all the ranges required for use in food production. There have been no concerns raised from any of the monitoring results done since the plant commenced operation.

Quality Variable and unit of measurement	Average Discharge Concentration per month	Maximum Anticipated Discharge Concentration per month
Coliforms (Colony Forming Units/ml)		
Enteric pathogens e.g. E.coli (Colony Forming Units/ml)		
pH (pH units)		
Temperature (°C)		
Acidity (mg/l)		
Alkalinity (mg/l)		
Aluminium (mg/l)		
Ammonia (mg/l)		
Arsenic (mg/l)		
Barium (mg/l)		
Boron (mg/l)		
Bromide (mg/l)		
Cadmium (mg/l)		
Calcium (mg/l)		

Chemical oxygen demand (mg/l)		
Chloride (mg/l)		
Chromium (mg/l)		
Chromium(vi) (mg/l)		
Cobalt (mg/l)		
Quality Variable and unit of measurement	Average Discharge Concentration/month	Maximum Anticipated Discharge Concentration/month
Copper (mg/l)		
Cyanide (mg/l)		
Fluoride (mg/l)		
Iron (mg/l)		
Lead (mg/l)		
Lithium (mg/l)		
Manganese (mg/l)		
Mercury (mg/l)		
Molybdenum (mg/l)		
Nickel (mg/l)		
Phenol (mg/l)		
Potassium (mg/l)		
Radionuclides (mg/l)		
Salinity		
Soap, oil or grease (mg/l)		

Sodium (mg/l)		
Sulphate (mg/l)		
Tin (mg/l)		
Total dissolved solids (mg/l)		
Total Suspended solids (mg/l)		
Total nitrogen (mg/l)		
		Maximum
Quality Variable and unit of measurement	Average Discharge Concentration/month	Anticipated Discharge Concentration/month
Quality Variable and unit of measurement Total phosphorus (mg/l)		Discharge
		Discharge
Total phosphorus (mg/l)		Discharge

2. Complete the following Monthly discharge pattern (in volume) below and indicate the unit of measurement thereof:

The discharge volume when the facility is fully operational, is approximately 500 m³/ day. The discharge volume is dependent on the seasonality of the catch, thus there can be big fluctuations in the volume of water used.

Month	Average				Ma	xim	um				
January		1	0	0	0	0					
February		1	0	0	0	0					
March		1	0	0	0	0					
April			9	0	0	0					

May	1	0	0	0	0				
June		8	5	0	0				
July		4	0	0	0				
August		8	0	0	0				
September	1	0	0	0	0				
October		3	0	0	0				
November		6	5	0	0				
December		7	5	0	0				
Total/annum	9	6	5	0	0				

In cubic meters	±500m³/day	OR
% of total Another unit of measurement (please specify)	OR OR	

3. Provide a description of any treatment processes applied to the effluent where applicable.

The effluent is screened before being discharged in order to removal solid proteins. There are no contaminants, chemicals or other pollutants in the discharge water.

SECTION I: COMPLIANCE MONITORING AND REPORTING

1. Provide a description of all monitoring points along the effluent stream.

The CSIR is conducting bi-annual monitoring within the port of Mossel Bay. The applicant monitors the quality of the abstraction water in order to confirm that it is fit for use near foodstuff.

2. Provide the frequency of monitoring of the above mentioned monitoring point(s).

The port is monitored on a bi-annual basis. The abstracted seawater is sampled and analysed twice a month.

3. Provide a detailed description of the type of monitoring, management strategies and maintenance plans

implemented for effluent quantity and quality, the receiving environment as well as structural integrity of the pipeline.

The facility internally monitors the abstracted seawater on a monthly basis to ensure that the quality is sufficient for foodstuffs intended for human consumption. The abstraction point is located only 7m east of the discharge point and the water quality monitoring has been acceptable to date. National Regulatory Compulsory Specifications (NRCS) conducts bi-monthly monitoring of the water in addition.

The CSIR conducts a twice yearly monitoring of the Mossel Bay harbour at numerous monitoring points. These include water quality samples and sediment grabs. The results indicate that the harbour is in a good condition.

The receiving environment for the discharge is inside the harbour and the discharge dissipates very quickly.

The pipes are asbestos cement and HDPE and be easily replaced should it become necessary. The integrity is more than sufficient for its purpose.

4. Provide the historic data on monitoring and compliance for the coastal outfall pipeline. Attach your information to this application form.

Please refer to Appendix A for historical data monitoring and compliance.

5. Provide a detailed description of maintenance plans in place for recording/monitoring devices, if any.

The equipment used to conduct the water sampling (CSIR) is mobile and does not remain in situ. The maintenance requirements for these are as per the specifications of the equipment used to conduct sampling. The analysis of the water samples is undertaken at a registered laboratory and it is assumed that their maintenance of devices is done according to the specifications.

6. Provide a detailed description of maintenance plans in place for treatment facilities, if any.

None.

 Provide a copy of any prior authorisation issued for the coastal discharge by the Department of Water Affairs, including a record of compliance for the last 12 (twelve) months to such an authorisation. Attach your information.

None.

- 8. For existing outfalls, do you have a lease agreement issued in terms of the Sea Shore Act,

 1935 (Act No. 21 of 1935) for the pipeline below the high water mark or proof of submission of an application for such a lease agreement to the relevant authority?
- 9. If YES, attach the proof thereof.
- 10. Provide details of the mandatory reporting regime as contained in Annexure 1 (Reporting).

Monthly water samples from abstraction points;

Twice yearly monitoring of water quality in the harbour.

SECTION J: CONTINGENCY AND DECOMMISSIONING PLANNING

1. Provide information on pipeline incidences continuous improvement plans contingency plans for effluent discharge and decommissioning plans implemented at or adopted by the facility for the past 12 (twelve) months if available.

None.

SECTION K: SPECIALIST TECHNICAL AND ENGINEERING REQUIREMENTS

- 1. Provide a detailed report on the following specialist technical and engineering requirements (refer to Annex for more on the generic requirements) if applicable:
- 1.1 Scope of study area and features

The SF Discharge pipeline is a subsurface asbestos cement pipe, approximately 56m in length that exits into the harbour at the quay.

Sea water abstraction takes place right at the dock immediately adjacent (±7m east) to the processing areas.



Figure 6: Discharge and abstraction pipelines

1.2 Marine ecology

Please see the CSIR / SAEON reports.

1.3 Microbiological Factors

The CSIR / SAEON results that were obtained during the period that the applicant was discharging into the harbor (2007 – 2014) have not shown any negative impacts associated with the discharge related to the activities on site.

1.4 Hydraulic design

None.

1.5 Achievable dilution

The dispersal of the effluent in the harbour is fast and has not been identified as problematic in the abstraction seawater close by

1.6 Sedimentation/re-suspension of solid phase particles

Solids are screened out by means of a 1mm mesh prior to discharge.

1.7 Pipeline construction considerations and structural design (including decommissioning)

The pipeline is an asbestos cement and HDPE pipe which provides sufficient capacity for the volume of discharge, is non corrosive and can be easily replaced or removed.

- 2. Describe any gaps in the above knowledge, any underlying assumptions made and any uncertainties when conducting the above specialist study (ies) in the above mentioned detailed report.
 - It is assumed that the information on which this report is based (specialist studies and project information, as well as existing information) is **correct, factual and truthful.**
 - The proposed development is in line with the statutory planning vision for the area (namely the local Spatial Development Plan), and thus it is assumed that issues such as the cumulative impact of development in terms of character of the area and its resources, have been taken into account during the strategic planning for the area.
 - It is assumed that all the relevant **mitigation measures** and agreements specified in existing authorisations are implemented in order to ensure minimal negative impacts and maximum environmental benefits.
 - It is assumed that Stakeholders and Interested and Affected Parties notified during the initial public
 participation process will submit all relevant comments within the designated 30-days review and
 comment period, so that these can included in the Report and timeously submitted to the delegated
 Authority, the Department Environmental Affairs for consideration.

DECLARATION

١	in my personal capacity or duly authorised
as	(state your capacity) by
	thereto hereby declare that I:
•	regard the information contained in this application form and associated documentation submitted to be

- true and correct, and
- am fully aware of my responsibilities in terms of Section 69 of the Integrated Coastal Management Act, 2008 (Act No. 24 of 2008);
- have provided access to all information at my disposal that is relevant to the application;
- will be responsible for the costs incurred in complying with the environmental legislation including but not limited to –
 - o costs incurred in connection with the appointment of a specialist/ consultant;
 - o costs incurred in respect of the undertaking of any process required in terms of this application;
 - costs in respect of any fee prescribed by the Minister in respect of this application and the discharge; and
 - the provision of security to ensure compliance with the applicable management and mitigation measures:
- am responsible for complying with the conditions that might be attached to any decision(s) issued by the Department;
- have the ability to implement the applicable management, mitigation and monitoring measures; and
- hereby indemnify, the government of the Republic, the Department of Environmental Affairs and all its
 officers, agents and employees, from any liability arising out of, inter alia, the content of any report, any
 procedure or any action for which the applicant or environmental assessment practitioner is
 responsible.

Please Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

	(Signature)	(Place)
(yyyy/mm/dd)	(Date)	(Designation/capacity)
		(Name of company/municipality/organisation

	Name and Surname	Address	Signature
Witness 1			

eaVuna	a Fishing CWDP MOS373/03
Witne	ess 2
FINA	AL Check list (tick the box were applicable)
1.	Paid prescribed application fee
2.	Motivation for the discharge as a BPEO
3.	Specialist technical and engineering requirements for assessment (Annexure 1)
4.	Environmental Authorisation and details, if applicable
5.	Lease agreement issued in terms of the Sea Shore Act, 1935 (Act No. 21 of 1935) for the pipeline below the
	high water mark or proof of submission of such an application, if applicable
6.	A copy of the baseline marine impact assessment for the receiving environment surrounding the coastal
	outfall pipeline
7.	A report outlining the impact of the effluent on the coastal receiving environment
8.	Information on any public forum established for the coastal outfall pipeline, including minutes of such meetings
	if applicable
9.	A copy of all comments and responses received and made during the public participation period
10.	A copy of any prior authorisation issued for the coastal discharge by the Department of Water Affairs
11.	Record of compliance for the last 12 (twelve) to the authorisation mentioned above