



## forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

# INVITATION TO BID

**BID REFERENCE NUMBER: MLRF211/24**

**TO APPOINT AN INDEPENDENT SERVICE PROVIDER TO CONDUCT A BASELINE BENTHIC SURVEY AND SPECIALIST MONITORING ON BEHALF OF THE DFFE/MLRF IN COMPLIANCE WITH THE STIPULATIONS IN THE OPERATIONAL PHASE MARINE ECOLOGY MONITORING AND THE ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE SEA-BASED AQUACULTURE DEVELOPMENT ZONE LOCATED WITHIN ALGOA BAY IN THE EASTERN CAPE FOR A PERIOD OF 36 MONTHS.**

**Contact person:**

**Name:** Ms Talitha Bikani/ Mr Lwandisa Hoza

**Office Telephone No:** (021) 402 3260/021 402 3425

**E-Mail:** [MLRFTENDERS@DFFE.GOV.ZA](mailto:MLRFTENDERS@DFFE.GOV.ZA)

**NATIONAL TREASURY CENTRAL SUPPLIER DATABASE (CSD) REGISTRATION INFORMATION**

Company name	Supplier registration number	Unique reference number	
			Main contractor
			Sub-contracted/ joint venture comp 1
			Sub-contracted/ joint venture comp 2

**CLOSING DATE OF THE BID: 11 NOVEMBER 2024 AT 11H00**

**Briefing session:**

**A virtual compulsory briefing session will be held on the 24<sup>th</sup> of October 2024 (Thursday) at 10:00. Link can be requested from [MLRFTENDERS@DFFE.GOV.ZA](mailto:MLRFTENDERS@DFFE.GOV.ZA)**

**MS TEAMS DETAILS ARE AS FOLLOWS:**

**Meeting ID:** 316 927 276 965

**Passcode:** kvfqcG

**Drop off Address:**

**The location of the drop off is: Tender Box, Ground Floor, Foretrust Building, 2 Martin Hammerschlag Way, Foreshore, Cape Town, 8001**

## PART A INVITATION TO BID

**YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF DEPARTMENT/ PUBLIC ENTITY)**

BID NUMBER:	MLRF211/24	CLOSING DATE:	11 NOVEMBER 2024	CLOSING TIME:	11:00
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DESCRIPTION	TO APPOINT AN INDEPENDENT SERVICE PROVIDER TO CONDUCT A BASELINE BENTHIC SURVEY AND SPECIALIST MONITORING ON BEHALF OF THE DFFE/MLRF IN COMPLIANCE WITH THE STIPULATIONS IN THE OPERATIONAL PHASE MARINE ECOLOGY MONITORING AND THE ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE SEA-BASED AQUACULTURE DEVELOPMENT ZONE LOCATED WITHIN ALGOA BAY IN THE EASTERN CAPE FOR A PERIOD OF 36 MONTHS
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**BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)**

GROUND FLOOR, FORETRUST BUILDING

MARTIN HAMMERSCHLAG WAY

FORESHORE, CAPE TOWN, 8001

**BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO**

**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**

CONTACT PERSON	Ms. Talitha Bikani	CONTACT PERSON	Mr Lwandisa Hoza
TELEPHONE NUMBER	021-402 3260	TELEPHONE NUMBER	021-402 3425
E-MAIL ADDRESS	MLRFtenders@dfpe.gov.za	E-MAIL ADDRESS	MLRFtenders@dfpe.gov.za

**SUPPLIER INFORMATION**

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX]  <input type="checkbox"/> Yes <input type="checkbox"/> No

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW ]
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**QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS**

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> NO
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS	

SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.

## PART B TERMS AND CONDITIONS FOR BIDDING

### 1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).

### 2. TAX COMPLIANCE REQUIREMENTS

- 2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER:

.....

CAPACITY UNDER WHICH THIS BID IS SIGNED:

.....

(Proof of authority must be submitted e.g. company resolution)

DATE:

.....

**Application for a Tax Clearance Certificate****Purpose**

Select the applicable option .....

Tenders ☐Good standing ☐

If "Good standing", please state the purpose of this application


**Particulars of applicant**

Name/Legal name (Initials & Surname or registered name)											
Trading name (if applicable)											
ID/Passport no						Company/Close Corp. registered no					
Income Tax ref no						PAYE ref no	7				
VAT registration no	4					SDL ref no	L				
Customs code						UIF ref no	U				
Telephone no	CODE		NUMBER			Fax no	CODE		NUMBER		
E-mail address											
Physical address											
Postal address											

**Particulars of representative (Public Officer/Trustee/Partner)**

Surname											
First names											
ID/Passport no						Income Tax ref no					
Telephone no	CODE		NUMBER			Fax no	CODE		NUMBER		
E-mail address											
Physical address											



Tender number						
Estimated Tender amount						R
Expected duration of the tender						year(s)
Particulars of the 3 largest contracts previously awarded						
Date started	Date finalised	Principal	Contact person	Telephone number	Amount	

Are you currently aware of any Audit investigation against you/the company?.....

If "YES" provide details

YES	NO
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[illegible]

I declare that the information furnished in this application as well as any supporting documents is true and correct in every respect.

Signature of applicant/Public Officer \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Name of applicant/  
Public Officer \_\_\_\_\_

1. It is a serious offence to make a false declaration.
2. Section 75 of the Income Tax Act, 1962, states: Any person who
  - (a) fails or neglects to furnish, file or submit any return or document as and when required by or under this Act; or
  - (b) without just cause shown by him, refuses or neglects to:
    - (i) furnish, produce or make available any information, documents or things;
    - (ii) reply to or answer truly and fully, any questions put to him ...As and when required in terms of this Act ... shall be guilty of an offence ...
3. **SARS will, under no circumstances, issue a Tax Clearance Certificate unless this form is completed in full.**
4. Your Tax Clearance Certificate will only be issued on presentation of your South African Identity Document or Passport (Foreigners only) as applicable.

**PRICING SCHEDULE**  
**(Professional Services)**

NAME OF BIDDER: .....

BID NO.: MLRF211/24

CLOSING TIME 11H00

CLOSING DATE: 11 NOVEMBER 2024

OFFER TO BE VALID FOR 120 DAYS FROM THE CLOSING DATE OF BID.

ITEM NO	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
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TO APPOINT AN INDEPENDENT SERVICE PROVIDER TO CONDUCT A BASELINE BENTHIC SURVEY AND SPECIALIST MONITORING ON BEHALF OF THE DFFE/MLRF IN COMPLIANCE WITH THE STIPULATIONS IN THE OPERATIONAL PHASE MARINE ECOLOGY MONITORING AND THE ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE SEA-BASED AQUACULTURE DEVELOPMENT ZONE LOCATED WITHIN ALGOA BAY IN THE EASTERN CAPE FOR A PERIOD OF 36 MONTHS.

1. The accompanying information must be used for the formulation of proposals.
2. Bidders are required to indicate a ceiling price based on the total estimated time for completion of all phases and including all expenses inclusive of all applicable taxes for the project. R.....
3. PERSONS WHO WILL BE INVOLVED IN THE PROJECT AND RATES APPLICABLE (CERTIFIED INVOICES MUST BE RENDERED IN TERMS HEREOF)

4. PERSON AND POSITION	HOURLY RATE	DAILY RATE
.....	R-----	-----
.....	R-----	-----
.....	R-----	-----
.....	R-----	-----
.....	R-----	-----

5. PHASES ACCORDING TO WHICH THE PROJECT WILL BE COMPLETED, COST PER PHASE AND MAN-DAYS TO BE SPENT
- R----- days
- R----- days
- R----- days
- R----- days

- 5.1 Travel expenses (specify, for example rate/km and total km, class of airtravel, etc). Only actual costs are recoverable. Proof of the expenses incurred must accompany certified invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....

TOTAL: R.....

Name of Bidder: .....

\*\* "all applicable taxes" includes value-added tax, pay as you earn, income tax, unemployment insurance contributions and skills development levies.

- 5.2 Other expenses, for example accommodation (specify, eg. Three star hotel, bed and breakfast, telephone cost, reproduction cost, etc.). On basis of these particulars, certified invoices will be checked for correctness. Proof of the expenses must accompany invoices.

DESCRIPTION OF EXPENSE TO BE INCURRED	RATE	QUANTITY	AMOUNT
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....
.....	.....	.....	R.....
TOTAL: R.....			

6. Period required for commencement with project after acceptance of bid .....  
 7. Estimated man-days for completion of project .....  
 8. Are the rates quoted firm for the full period of contract? \*YES/NO  
 9. If not firm for the full period, provide details of the basis on which adjustments will be applied for, for example consumer price index. ....  
 .....  
 .....  
 .....

\*[DELETE IF NOT APPLICABLE]

Any enquiries regarding bidding procedures may be directed to the –

#### DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT

Contact Person: Ms. Talitha Bikani  
 Contact Number: 021 402 3260  
 E-Mail: MLRFtenders@dffe.gov.za

Or

Contact Person: Mr. Lwandisa Hoza  
 Contact Number: 021 402 3425  
 E-Mail: MLRFtenders@dffe.gov.za

(NOTE: Please circle or tick your answer)

## BIDDER'S DISCLOSURE

### 1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

### 2. Bidder's declaration

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

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<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.



2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....  
.....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract? **YES/NO**

2.3.1 If so, furnish particulars:

.....  
.....

### **3 DECLARATION**

I, \_\_\_\_\_ the \_\_\_\_\_ undersigned,  
(name)..... in  
submitting the accompanying bid, do hereby make the following  
statements that I certify to be true and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	.....
Signature	Date
.....	.....
Position	Name of bidder

## PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022**

### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

*(delete whichever is not applicable for this tender).*

- a) The applicable preference point system for this tender is the **90/10** preference point system.
- b) The applicable preference point system for this tender is the **80/20** preference point system.
- c) Either the **90/10 or 80/20 preference point system** will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
<b>PRICE</b>	80
<b>SPECIFIC GOALS</b>	20
<b>Total points for Price and SPECIFIC GOALS</b>	<b>100</b>

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

## 2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

## 3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

### 3.1. POINTS AWARDED FOR PRICE

#### 3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 \\
 \mathbf{Ps} = 80 \left( 1 - \frac{Pt - Pmin}{Pmin} \right) & \mathbf{or} & \mathbf{Ps} = 90 \left( 1 - \frac{Pt - Pmin}{Pmin} \right)
 \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

### 3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

#### 3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} 80/20 & \text{or} & 90/10 \\ P_s = 80 \left( 1 + \frac{P_t - P_{max}}{P_{max}} \right) & \text{or} & P_s = 90 \left( 1 + \frac{P_t - P_{max}}{P_{max}} \right) \end{array}$$

Where

- $P_s$  = Points scored for price of tender under consideration  
 $P_t$  = Price of tender under consideration  
 $P_{max}$  = Price of highest acceptable tender

### 4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
  - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

**Table 1: Specific goals for the tender and points claimed are indicated per the table below.**

**(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.**

**Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)**

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
51% black ownership	N/A	8	N/A	
50% women ownership	N/A	4	N/A	
Youth ownership	N/A	4	N/A	
Disability	N/A	4	N/A	
Non- compliant contributor	N/A	0	N/A	

#### **DECLARATION WITH REGARD TO COMPANY/FIRM**

4.3. Name of company/firm.....

4.4. Company registration number: .....

4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One-person business/sole propriety

Close corporation

Public Company

Personal Liability Company

(Pty) Limited

Non-Profit Company

State Owned Company

[TICK APPLICABLE BOX]



4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
  - (a) disqualify the person from the tendering process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution, if deemed necessary.

.....  
**SIGNATURE(S) OF TENDERER(S)**

**SURNAME AND NAME:** .....

**DATE:** .....

**ADDRESS:** .....

.....

.....

.....

# **THE NATIONAL TREASURY**

**Republic of South Africa**



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## **GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT**

**July 2010**

**GOVERNMENT PROCUREMENT**  
**GENERAL CONDITIONS OF CONTRACT**  
**July 2010**

**NOTES**

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- The General Conditions of Contract will form part of all bid documents and may not be amended.
- Special Conditions of Contract (SCC) relevant to a specific bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

## **TABLE OF CLAUSES**

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information; inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analysis
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Contract amendments
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination for default
24. Dumping and countervailing duties
25. Force Majeure
26. Termination for insolvency
27. Settlement of disputes
28. Limitation of liability
29. Governing language
30. Applicable law
31. Notices
32. Taxes and duties
33. National Industrial Participation Programme (NIPP)
34. Prohibition of restrictive practices

## **General Conditions of Contract**

### **1. Definitions**

1. The following terms shall be interpreted as indicated:
  - 1.1 "Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
  - 1.2 "Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
  - 1.3 "Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
  - 1.4 "Corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
  - 1.5 "Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
  - 1.6 "Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
  - 1.7 "Day" means calendar day.
  - 1.8 "Delivery" means delivery in compliance of the conditions of the contract or order.
  - 1.9 "Delivery ex stock" means immediate delivery directly from stock actually on hand.
  - 1.10 "Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.
  - 1.11 "Dumping" occurs when a private enterprise abroad markets its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the

RSA.

- 1.12 "Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- 1.13 "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.
- 1.14 "GCC" means the General Conditions of Contract.
- 1.15 "Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
- 1.16 "Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.
- 1.17 "Local content" means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.
- 1.18 "Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
- 1.19 "Order" means an official written order issued for the supply of goods or works or the rendering of a service.
- 1.20 "Project site," where applicable, means the place indicated in bidding documents.
- 1.21 "Purchaser" means the organization purchasing the goods.
- 1.22 "Republic" means the Republic of South Africa.
- 1.23 "SCC" means the Special Conditions of Contract.
- 1.24 "Services" means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such



obligations of the supplier covered under the contract.

- 1.25 "Written" or "in writing" means handwritten in ink or any form of electronic or mechanical writing.

## **2. Application**

- 2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
- 2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.
- 2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.

## **3. General**

- 3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
- 3.2 With certain exceptions, invitations to bid are only published in the Government Tender Bulletin. The Government Tender Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from [www.treasury.gov.za](http://www.treasury.gov.za)

## **4. Standards**

- 4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.

## **5. Use of contract documents and information; inspection.**

- 5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
- 5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.
- 5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.

## **6. Patent rights**

- 6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.

**7. Performance security**

- 7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
- 7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
- 7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:
- (a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or
  - (b) a cashier's or certified cheque
- 7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.

**8. Inspections, tests and analyses**

- 8.1 All pre-bidding testing will be for the account of the bidder.
- 8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.
- 8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
- 8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
- 8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
- 8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
- 8.7 Any contract supplies may on or after delivery be inspected, tested or

analyzed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.

- 8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.

#### **9. Packing**

- 9.1 The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.

#### **10. Delivery and documents**

- 10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

- 10.2 Documents to be submitted by the supplier are specified in SCC.

#### **11. Insurance**

- 11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.

#### **12. Transportation**

- 12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.

#### **13. Incidental services**

- 13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:

- (a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;

- (d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and
- (e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.

13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.

#### 14. Spare parts

14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:

- (a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and
- (b) in the event of termination of production of the spare parts:
  - (i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and
  - (ii) following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

#### 15. Warranty

15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

15.2 This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.

15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.

15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.

15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take

such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.

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|---|---|
| <b>16. Payment</b>                              | <p>16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.</p> <p>16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfillment of other obligations stipulated in the contract.</p> <p>16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.</p> <p>16.4 Payment will be made in Rand unless otherwise stipulated in SCC.</p>   |
| <b>17. Prices</b>                               | <p>17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized in SCC or in the purchaser's request for bid validity extension, as the case may be.</p>  |
| <b>18. Contract amendments</b>                  | <p>18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.</p>   |
| <b>19. Assignment</b>                           | <p>19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.</p>   |
| <b>20. Subcontracts</b>                         | <p>20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under this contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.</p>  |
| <b>21. Delays in the supplier's performance</b> | <p>21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.</p> <p>21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.</p> <p>21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.</p> <p>21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the</p> |

supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.

21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.

21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without canceling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.

## 22. Penalties

22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.

## 23. Termination for default

23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:

- (a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2;
- (b) if the Supplier fails to perform any other obligation(s) under the contract; or
- (c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.

23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.

23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.

23.4 If a purchaser intends imposing a restriction on a supplier or any



person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the intended penalty as not objected against and may impose it on the supplier.

23.5 Any restriction imposed on any person by the Accounting Officer / Authority will, at the discretion of the Accounting Officer / Authority, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the Accounting Officer / Authority actively associated.

23.6 If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information:

- (i) the name and address of the supplier and / or person restricted by the purchaser;
- (ii) the date of commencement of the restriction
- (iii) the period of restriction; and
- (iv) the reasons for the restriction.

These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector.

23.7 If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.

#### 24. Anti-dumping and countervailing duties and rights

24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which

may be due to him

- 25. Force Majeure**
- 25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
- 25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.
- 26. Termination for Insolvency**
- 26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.
- 27. Settlement of Disputes**
- 27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
- 27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
- 27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.
- 27.5 Notwithstanding any reference to mediation and/or court proceedings herein,
- (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and
- (b) the purchaser shall pay the supplier any monies due the supplier.
- 28. Limitation of Liability**
- 28.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6;
- (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and

		(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
29. Governing language	29.1	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
30. Applicable law	30.1	The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
31. Notices	31.1	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice
	31.2	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
32. Taxes and duties	32.1	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
	32.2	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
	32.3	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.
33. National Industrial Participation Programme (NIP)	33.1	The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.
34. Prohibition of Restrictive practices	34.1	In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).
	34.2	If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.

- 34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.

# MARINE LIVING RESOURCES FUND

Foretrust Building, Main Hammarweg Way, Foreshore, Cape Town, 8001 or Private Bag X2, ROSSBAAU, 8012 (FASCIMILE NO. 021-4833226)

## MLRF ENTITY MAINTENANCE AND CREDIT ORDER INSTRUCTION

(Please complete or mark with a "X" in black ink where applicable. A bank stamp is required to verify your banking details. In case of a cheque account a cancelled cheque must be included. Please return form by post or by hand delivery or by facsimile.)

TAKE-ON	<input type="checkbox"/> NEW	<input type="checkbox"/> UPDATE	ENTITY TYPE	<input type="checkbox"/> BUSINESS	<input type="checkbox"/> DEPARTMENT	<input type="checkbox"/> EMPLOYEE	<input type="checkbox"/> OTHER
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FROM: CREDITOR / ENTITY (DETAILS)	TITLE	
	SURNAME	
	FIRST NAME/S	
	BUSINESS NAME	
	TRADING NAME	
	BUSINESS REG No.	
	VAT REGISTERED	<input type="checkbox"/> Y <input type="checkbox"/> N
	VAT REGISTRATION NO.	
	ID NO.	
	DEPARTMENT NAME	
PERSONAL NO. *		
		For employees only

CONTACT DETAILS	STREET / PHYSICAL ADDRESS		POSTAL CODE
	POSTAL ADDRESS		POSTAL CODE
	BUSINESS TELEPHONE No.		DIALLING CODE
	BUSINESS FACSIMILE No.		DIALLING CODE
	NAME OF CONTACT PERSON		
	E-MAIL ADDRESS		
CELLULAR TELEPHONE No.			

DETAILS OF FINANCIAL INSTITUTION FOR ELECTRONIC BANKING TRANSFERS:		BANK DATE STAMP (COMPULSORY)
BANK NAME:		
BRANCH NAME & CITY/TOWN		
BRANCH NUMBER/CODE		
ACCOUNT NUMBER		
ACCOUNT TYPE	<input type="checkbox"/> CURRENT <input type="checkbox"/> SAVINGS <input type="checkbox"/> TRANSMISSION	

I / We hereby request, instruct and authorise you to pay any amounts which may accrue to me / us to the credit of my / our account with the above-mentioned bank.

I / we understand that the credit transfers hereby authorised will be processed electronically through a system known as the "ACE ELECTRONIC FUNDS TRANSFER SERVICE", and I/we also understand that no additional advice of payment will be provided by my/our bank. Details of each payment will be printed on my/our bank statement or any accompanying voucher.

I / We understand that a payment advice will be supplied by the Marine Living Resource Fund in the normal way, and that it will indicate the date on which funds will be available in my / our account.

This authority may be cancelled / changed by giving prior written notice, by way of registered post or facsimile.

SIGNATURE OF AUTHORISED PERSON		POSITION HELD	
PRINT NAME OF AUTHORISED PERSON		DATE (DD/MM/YYYY):	



THE MARINE LIVING RESOURCES FUND, A SCHEDULE 3A PUBLIC ENTITY ESTABLISHED IN TERMS OF THE PUBLIC FINANCE MANAGEMENT ACT, 1999 (ACT NO 1 of 1999) AND THE DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT ("DFFE") (IN ITS COMMITMENT TO THE PRINCIPLES ENSHRINED IN THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA, 1996) ADHERES TO THE PROVISIONS OF THE BROAD BASED BLACK ECONOMIC EMPOWERMENT ACT, 2003 (Act No. 53 OF 2003) (B-BBEE), THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 (Act No. 5 OF 2000) ("PPPF") AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022.

## **TERMS OF REFERENCE**

**MLRF211/24: TO APPOINT AN INDEPENDENT SERVICE PROVIDER TO CONDUCT A BASELINE BENTHIC SURVEY AND SPECIALIST MONITORING ON BEHALF OF THE DFFE/MLRF IN COMPLIANCE WITH THE STIPULATIONS IN THE OPERATIONAL PHASE MARINE ECOLOGY MONITORING AND THE ENVIRONMENTAL MANAGEMENT PROGRAMME FOR THE SEA-BASED AQUACULTURE DEVELOPMENT ZONE LOCATED WITHIN ALGOA BAY IN THE EASTERN CAPE FOR A PERIOD OF 36 MONTHS.**



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## **1. PURPOSE**

- 1.1 To solicit the services of a suitably qualified Service Provider (SP) to conduct a baseline benthic survey and specialist monitoring according to the Operational Phase Marine Ecology Monitoring Plan for the sea based Aquaculture Development Zone (ADZ) located within Algoa Bay in the Eastern Cape, in compliance with stipulations in the Environmental Authorisation (EA) and the Environmental Management Programme (EMPr) for the ADZ, for a contract period of thirty-six (36) months.

## **2. INTRODUCTION AND BACKGROUND**

2.1 The Aquaculture Development Zone (ADZ) is an area that has been earmarked specifically for aquaculture activities with the aim of encouraging investor and consumer confidence; creating incentives for industry development; to provide marine aquaculture services; to manage the risks associated with aquaculture; as well as to provide skills development and employment for coastal communities. The development of ADZs supports the Policy for the Development of a Sustainable Marine Aquaculture sector in South Africa (2007) aimed at creating an enabling environment that will promote growth and sustainability of the marine aquaculture sector in South Africa, as well as to enhance the industry's contribution to South Africa's economic growth.

2.2 In 2009 a Strategic Environmental Assessment (SEA) was undertaken for the entire South African coastline to identify suitable aquaculture sites. In this assessment, the Eastern Cape was highlighted as an area holding potential for the establishment of ADZs. An ADZ includes a number of components and activities which may result in negative impacts to the environment. These include (but are not limited to) impacts on biodiversity (marine), the sense of place (visual issues) and national heritage resources. The proposed development triggered a number of activities listed in the Environmental Impact Assessment Regulations promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

2.3 Based on the areas that were identified through the SEA, the Department (MLRF) undertook an Environmental Impact Assessment (EIA) for the establishment of an Aquaculture Development Zone in Algoa Bay in 2018/2019 and the EA was granted on the 26<sup>th</sup> February 2020. Appeals against the authorisation were lodged to the then Minister of Environmental Affairs and the authorisation was upheld as per the letter dated 18<sup>th</sup> June 2021 and an amended EA was issued on the 27<sup>th</sup> September 2021 (**Annexure 1**).

2.4 The total area for the proposed activity covers a total area of 1 118.4 ha of which is divided into Algoa 1 Option 1, 284.4 ha (bivalves only), Algoa 6 (bivalves only) 479 ha and Algoa 7 (finfish only) 355 ha. The EA

gives authorisation to farm a variety of marine species such as Pacific Oyster, Cape Rock Oyster, Black Mussel, Brown Mussel, Mediterranean Mussel, White Mussel, Yellowtail, Dusky Kob, Silver Kob, Yellowfin tuna, Sole, Geelbek, Spotted grunter, White Steenbras, White Stumpnose and Red Roman. Algoa 6 has been used for farming oysters since 1997 currently with one operational farm, while Algoa 1 and Algoa 7 are newly proclaimed precincts with no aquaculture footprint.

2.5 The MLRF seeks to appoint a service provider to conduct specialist monitoring and associated activities as required by the Operational Phase Marine Ecology Monitoring Plan (i.e. Monitoring Plan) in compliance with the stipulations in the EA and the EMPr for the sea-based ADZ located within the Algoa Bay in the Eastern Cape, for a contract period of thirty-six (36) months.

## 2.6 OPERATIONAL PHASE MARINE ECOLOGY MONITORING PLAN (i.e. Monitoring Plan)

### 1 Introduction

The RSA Department of Forestry, Fisheries and Environment, (DFFE) has established a sea-based aquaculture development zone (ADZ) in Algoa Bay, on the SE coast of South Africa. As shown in Figure 1-1 the ADZ will host three precincts: Algoa 1, offshore of Summerstrand, Algoa 6, near the Port of Port Elizabeth NW breakwater, and Algoa 7 offshore of the Port of Ngqura. The Algoa 1 and Algoa 6 precincts have been designated for molluscan bivalve farming while Algoa 7 is designated for finfish (Hutchings et al, 2019). Algoa 6 has been used for farming oysters for some years, Algoa 1 and Algoa 7 are newly proclaimed with no aquaculture history.

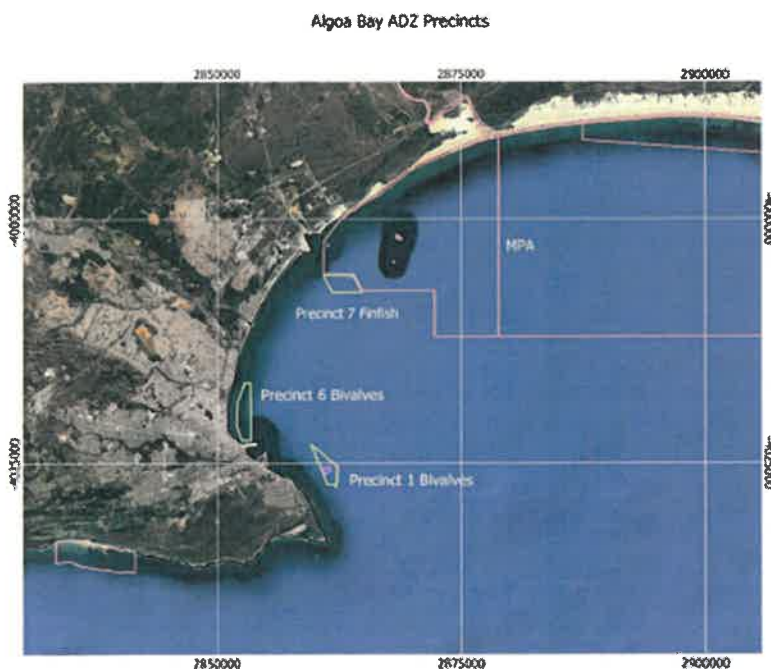


Figure 1-1: ADZ Precincts & MPA

Aquaculture at the envisaged scales in the AB-ADZ brings risks of environmental impairment and thus monitoring with possible management interventions is required. This is specified in the Basic Assessment Report (BAR) Environmental Management Programme (EMPr) compiled by Massie et al (2019). The document updates the earlier EMPr of Mackay and van Zyl (2012) and incorporates aspects of the Saldanha Bay ADZ EMPr (du Toit and Reuther 2017).

The EMPr differentiates between ADZ and farm level monitoring. The former encompasses monitoring for wider spatial and cumulative impacts of farms at precinct and ADZ level implemented and coordinated by DFFE through the Aquaculture Development Management Committee (AMC). Farm level monitoring will be the operator's responsibility and includes providing records of animal husbandry, stock health, feeding programmes, and water and sediment quality monitoring within the respective farm lease area.

The monitoring plan described here applies to the ADZ level during the operations phase.

Algoa Bay is biologically highly diverse (summarised in Hutchings et al 2019) and the premise behind the ADZ is that effects from developing sea-based aquaculture will not materially impair biodiversity at the bay scale nor outside of spatially constrained areas at individual farms. Modelling indicates this to be so (Wright et al 2019) but needs to be verified by monitoring.

## 2 Monitoring approach

The main purpose of monitoring is to detect change in specified indicators in space and/or time and determine whether there are adverse effects. If so, management interventions may be initiated and thus a secondary purpose is to check whether these meet their goals.

The monitoring programme needs to be focused, pragmatic, scientifically robust and achievable given resource, and financial constraints. This is especially so as experience has shown that intricate, technically and resource demanding monitoring programmes tend to have short lifespans. Further, monitoring should be based on scientifically creditable methods shown to be applicable to the environmental issues being addressed. This indicates that method development should not be part of the programme, but method enhancement could be, if appropriate. Research that may be done should be on understanding implications of monitoring results and funded separately to the programme.

The monitoring programme is based on the Before/After/Control/Impact principles (BACI) (Underwood, 1992, Underwood & Chapman 2013) and weight of evidence. The former comprises the establishment of reliable baselines before commencement of farming activities and comparisons between measurements at control and impact sites throughout the lifetime of farming. This design and appropriate indicator variables and related thresholds allow real environmental change attributable to farm activities to be identified in a naturally variable environment.

Weight of evidence is the integration of multiple, i.e., more than one, independent lines of evidence to, in this case, reach reliable conclusions on the ecological health of the environmental component being measured (Chapman, 2016). The plan achieves this by employing physicochemical and biological metrics in the monitoring scheme.

### 3 Identified marine ecology risks

As listed for the Saldanha Bay ADZ in DFFE (2022) bivalve and finfish aquaculture within the three precincts of the Algoa Bay ADZ brings risks of environmental degradation primarily through:

- modification of the seabed by organic loading from faeces (bivalves and finfish), uneaten food (finfish) and biofouling organisms falling off farm structures (bivalves and finfish). Deposition layers on the seabed >7 mm can impede oxygen fluxes into the sediment body and lead to anoxia and linked sulphidic sediments (Lohrer et al 2006) with loss of benthos and/or modification of the macrobenthos community structure,
- modification of water column dissolved oxygen and inorganic nitrogen concentrations, the latter being mainly (> 96%) ammonium (NH<sub>4</sub><sup>+</sup>), an inorganic nutrient, and a minor proportion of ammonia (NH<sub>3</sub>) which is toxic (ANZECC 2000). Thus, both nitrification with enhanced phytoplankton production and toxicity effects can arise,
- Trace metal contamination from finfish farming through leaching of copper and zinc from antifouling paints and introduction of zinc from fish food pellets. Through partitioning of copper to suspended particulate matter and zinc being in faeces and uneaten food both metals can accumulate in seabed sediments with possible toxicity effects on benthos, and
- removal of seston by the filter feeding bivalves reducing phytoplankton concentrations downstream of bivalve farms<sup>1</sup>.

Other effects that may be generated but are not addressed here as they are dealt with in the EMP<sub>r</sub> (Massie et al 2019) include:

- creation of habitat by farm structures,
- alteration of behaviour and entanglement of seabirds and marine fauna at finfish sites,
- introduction of aliens and spread of pests,
- transmission of diseases to wild populations, and
- genetic interaction with wild populations by shellfish and finfish.

## 4 Required monitoring

### 4.1 Scope

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<sup>1</sup> The Saldanha Bay monitoring plan includes monitoring possible increases in picophytoplankton. Algoa Bay is well flushed compared to, e.g., Small Bay in Saldanha Bay and dominance of this size group should be unlikely

This monitoring plan is focused on the operational phase of the ADZ. It specifies measures for baseline surveys, the before component of BACI, and monitoring of seabed state and water column conditions within and outside of the three defined precincts. Installation and decommissioning phases are to be addressed separately.

## **4.2 Guiding documents**

The guiding documents for the plan inter alia included:

- The Algoa Bay ADZ EMPr (Massie et al 2019),
- The BAR specialist studies on ecological impacts of finfish farming (Hutchings et al 2019), dispersion modelling (Wright et al 2019), and the benthic habitat (Dawson et al 2019),
- The DFFE (2022) Saldanha Bay ADZ monitoring plan, and Cranford et al (2017) and Cranford et al (2022) guidance on seabed redox state measurements and applicable effect thresholds,
- BACI principles (Underwood 1992, Underwood & Chapman 2013) and the Saldanha Bay aquaculture monitoring plan (DFFE 2022). The latter provides detail and is broadly followed. The benefit is that the stressors are similar and comparable approaches to monitoring will boost shared learning and provide comparative results across the ADZs.

## **4.3 Ecological indicators to be monitored.**

From section 3 above the ecological indicators that require monitoring follow those identified for the Saldanha Bay ADZ (DFFE 2022) and are:

- the sediment geochemical variables of total sulfides ( $S^{2-}$ ; which is a composite of  $H_2S$ ,  $HS^-$  and  $S^{2-}$ ) and redox potential (Eh).  $S^{2-}$  concentrations are to be measured by methylene blue colorimetry or UV spectrophotometry as ion selective probes have been shown to produce variable results (Cranford et al, 2017). Methylene blue colorimetry has a limit of quantification (LOD) of  $200 \mu M$  and can thus miss lower  $S^{2-}$  concentrations and early onset of physiological stress in macrofauna (Cranford et al 2020). Redox potential measurements should be used in parallel with this method so that sample sites approaching hypoxia and potentially with low  $S^{2-}$  concentrations can be identified,
- visual and odour characteristics of seabed sediments,
- surficial sediment geochemical characteristics comprising total organic carbon (TOC), total organic nitrogen (TON), copper (Cu), zinc (Zn) and aluminium (Al) concentrations. Al is employed as a normaliser accounting for sediment grain size variations as high Al concentrations are characteristic of aluminosilicates in silt and clay sediments (e.g., Birch 2020).
- sediment geotechnical characteristics (particle size distributions, structure, porosity),
- benthic macrofaunal community species diversity, richness and biomass, and indices indicative of oxygen stress,
- near-bottom oxygen concentration, and

- upper water column chlorophyll concentration (fluorometer).

## 4.4 Thresholds

### 4.4.1 Sediments

Ecological quality status (EQS) classifications provide numerical thresholds for characterising sediment bodies in terms of risks to the benthic community. Table 4-1 lists ranges of geochemical and biological variables that have been used to define thresholds of effects in the Saldanha Bay ADZ monitoring along with the Warwick statistic that are to be applied in Algoa Bay.

Table 4-1: Ranges of sediment Redox, sulphide concentrations, biotic index indicators and **effect** levels on sediments. (Modified from DFFE (2022) based on Cranford et al (2020) and Borja et al (2000 & 2003)). Warwick Statistic thresholds are guided by measurements in Winckler (1999).

	Oxic A	Oxic B	Hypoxic A	Hypoxic B	Anoxic
<b>Geochemical</b>					
Redox (Eh) mV	>100	100 to -50	-50 to -100	-150 to -150	>150
Sulphides (S <sup>2-</sup> ) µM (methylene blue method)	>75	75-250	250-500	500-1100	>1100
<b>Biological</b>					
Adjusted (Ln) Shannon-Wiener Diversity Index (H') <sup>1</sup>	>2.8	2.8-2.1	2.1-1.4	1.4-1.7	<0.7
Warwick Statistic	≥0	≥0	<0	<<0	n/a <sup>3</sup>
Infaunal Trophic Index (ITI) <sup>2</sup>	>50	50-25	<25	<25	<5
AZTI AMBI <sup>2</sup>	>1.2	1.2-3.3	3.3-5	5-6	>6
Adjusted AMBI <sup>2</sup>	>1.2	1.2-3.0	3.0-4.8	4.8-6	>6
Effects Magnitude	Low	Low	Possible adverse effects	Likely adverse effects	Severe effects

<sup>1</sup>Applies PRIMER equation as opposed to earlier studies that used Log<sub>e</sub> (DFFE 2022).

<sup>2</sup>Upward revision by DFFE (2022) based on results from Cranford et al (2020).

<sup>3</sup>Anoxic sediments should be devoid of benthic macrofauna.

For application Oxic B and Hypoxic A enrichment are the accepted limits in precincts outside of farm AZEs and inside AZE boundaries for finfish farms (Precinct 7) or beneath shellfish longlines in Precincts 1 and 6 respectively. AZEs are 30m radius.

### 4.4.2 Benthos

Shannon-Wiener diversity index, Warwick statistic, and ITI thresholds listed in Table 4-1 and no material departure from community structure at reference sites for the specific precinct, as shown, for example by univariate indices of species richness, abundance, multivariates such as MDS (PRIMER).

### 4.4.3 Metals

Within the AZE of finfish farm Cu should be <108 mg/kg, Zn <270 mg/kg. outside of the AZE <34 mg/kg Cu and <150 mg/kg Zn.



#### **4.4.4 Water column**

There are no guidelines for chlorophyll concentrations, so comparisons are against apparent upstream levels to show the possible downstream extent of grazing effects in bivalve farms (precincts 1 & 6) or nitrification from nutrients emanating from farms (precincts 1, 6 & 7).

Dissolved oxygen concentrations in the bottom 1/3 of the measured water column should be above hypoxic concentrations (2ml/l) and/or the median of binned data should be >20<sup>th</sup> percentile of reference station concentrations for this depth layer.

#### **4.5 Monitoring survey sites**

An overview of the precincts is shown in Figure 1-1. At each of the precincts there are to be control sites outside of the precinct boundaries and impact sites within these. Impact stations are random and are to be re-randomised for each survey whilst the control stations are fixed. Impact stations are stratified in that precincts 1 & 6 (bivalves) have a density of 1 per 50 Ha and the finfish precinct (7) of 1 per 20 Ha as in DFFE (2022). Randomisation of impact station locations can be achieved on GIS, setting minimum inter-station distances of 250m. This achieves independence between stations and gives sufficient space for replicate sampling within 50m radii without compromising independence.

Transect stations for water column profiling of temperature, salinity, chlorophyll fluorescence, and dissolved oxygen will be employed. These will be aligned to the predominant surface current directions which are shore parallel (Dawson et al, 2019). It is considered that both bivalve and finfish production systems will be aligned normal to the predominant current directions so the transects cover upstream and downstream conditions across the production systems.

Two sentinel sites for moored instrumentation have been selected, one immediately north of the Precinct 7 boundary within the MPA and the other between Precinct 6 and Precinct 1. It is probable that if there is any water mass retention at all in Algoa Bay it would be in this locality even though current measurements in this region show this to be unlikely (Schumann et al 2005).

The major features of the precincts as described in Dawson et al (2019) are summarised below along with sampling station distributions. The georeferences for these are in the Appendix.

##### **4.5.1 Precinct 1 (bivalves)**

Water depths in Precinct 1 range from 21m in the west to 40 m in the south-east. Slopes across the precinct appear to be regular although flattening to an extent beyond 33m depths (Dawson et al 2019, Figure 10). The plotted bathymetry does not indicate that reefs are present although basket star reef is a popular dive site in ~25-29m depth in the approximate centre of the precinct. The area has been excised from the precinct in terms of bivalve farming (Figure 4-1). Sediments in the precinct are classified as medium to coarse sands with an average organic content of 3.4%. Surface and midwater currents flowed predominantly southerly but are bimodal near the seabed with north



and south ward flows. ~70% of current velocities at all depths measured were <15 cm/s but did attain velocities above 30 cm/s in a small percentage of the measurements.

Precinct 1 benthos showed polychaetes and amphipods as the most abundant taxa with echinoderms being relatively well represented. This does not indicate anthropogenic disturbance.

The main feature of the precinct is the basket star reef. As this was not detected in the bathymetric survey it is not certain that this is the only reef/hard substrate present.

Figure 4-1 shows the sampling sites for the precinct. The randomised seabed impact stations cover the eastern, deeper areas of the precinct but not the southern portion. The three reference stations (1a-1c) are 200-360m outside the precinct boundary of the northern, mostly upstream, part of the precinct.

A single measurement station is included for the reef area. This is a provisional location and may need to be shifted after further mapping.



Figure 4-1: Algoa Bay sea-based aquaculture precincts. Sampling locations at Precinct 1. Map projection is WGS 84 Pseudo Mercator (EPSG:3857).

#### 4.5.2 Precinct 6 (bivalves)

Water depths in Precinct 6 range from a shallow 5.5m in the south-western inshore section of the precinct to 13m on the eastern boundary. Slopes across the precinct appear to be regular with no reef structures reported for the Dawson et al (2019) bathymetry survey. Sediments are uniformly fine sands with average organic content of 1.6%. Oysters are being farmed in the precinct and the low organic content indicates that sedimenting organic material from the farms is being flushed out of the area. Current velocities are low averaging 4 cm/s, occurrence of calm periods high (~41%) and direction of flow is variable. This indicates that wave action is probably responsible for removal of sedimenting organic matter in this precinct, the seabed being well within the wave base.

Amphipoda, decapoda, echinoderms and polychaetes dominate the benthos in Precinct 6. Despite possible organic loading from oyster farming and pollutants from the Papenkuils canal discharge and the port this indicates a healthy diverse benthos community.

There are no anomalous features apparent in the existing data covering the region of the precinct.

Figure 4-2 shows the sampling sites for the precinct. The randomised seabed impact stations cover the northern and southern sections with a gap in the centre of the precinct. The three reference stations (6a-6c) are 260-380m outside the precinct boundary of the precinct. No reference station could be placed to the south due to the proximity of the port.



Figure 4-2: Algoa Bay sea-based aquaculture precincts. Sampling locations at Precinct 6. Map projection is WGS 84 Pseudo Mercator (EPSG:3857).

#### 4.5.3 Precinct 7 (finfish)

Water depths in Precinct 7 range from 18m in the north-west of the precinct to 31m in the southeast. The slope is regular, and isobaths run parallel to the shoreline. There is no indication of reef structures. Sediments are uniformly fine sands with average organic content of 2.7%. Measured currents in the region show predominantly low velocities (90% < 15 cm/s) with higher velocities in the surface than at depth. Calm conditions (current velocity < 0.5 cm/s) occur for <1% of the time. Recorded maximum velocities were appreciable at 40-53 cm/s. Direction of flow was variable but south-west and north-east directions were the most frequent.

Precinct 7 benthos is dominated by polychaetes that comprise 69% of the taxon abundance. Although present, amphipoda and echinoderms are minor contributors to the benthos community. This pattern is indicative of disturbance,

The only 'anomalous' feature in the precinct is the uniformity in sediment particle size range and the high polychaete abundance in the benthos. This was attributed to the influence of the closely adjacent dredge spoil dump site.

Figure 4-3 shows the sampling sites for the precinct. The randomised seabed impact stations cover the bulk of the precinct but with gaps in the western and eastern areas. The three reference stations (7a-7c) are 260-490m outside the precinct boundary to the west and south of the precinct. No reference station is placed north of precinct as this would need to be in the MPA. The CTD transect runs parallel to the bathymetry from north-east to south-west.

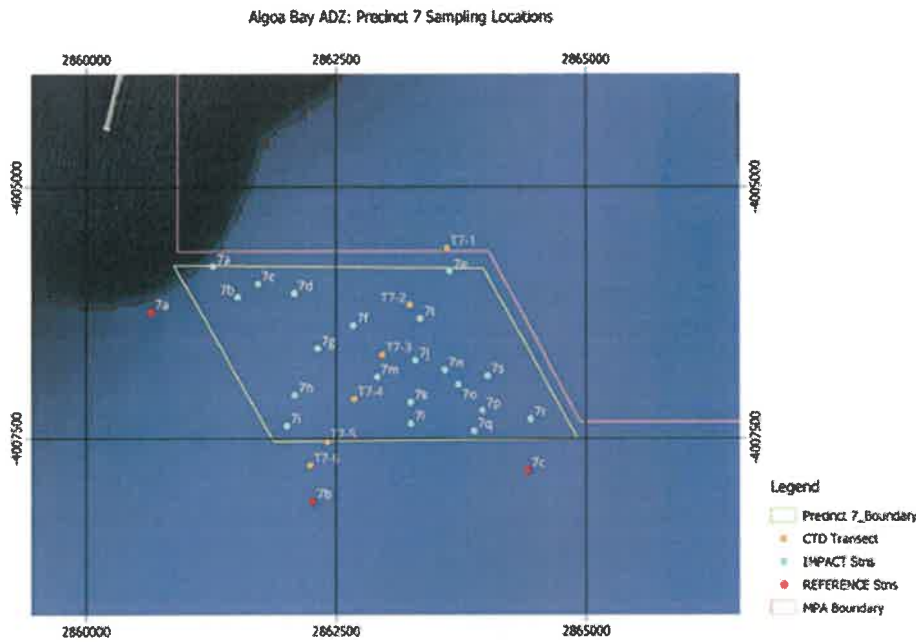


Figure 4-3: Algoa Bay sea-based aquaculture precincts. Sampling locations at Precinct 7. Map projection is WGS 84 Pseudo Mercator (EPSG:3857).

#### 4.5.4 Sentinel sites

Two sentinel sites are to be established, one immediately north of Precinct 7 in the MPA and the second one west of Precinct 6 in southern Algoa Bay (Figure 4-4). The former is to measure possible influences of the aquaculture development impinging on the MPA, primarily through modified bottom water dissolved oxygen concentrations. The latter is to measure possible accumulating effects on phytoplankton biomass and near seabed dissolved oxygen concentrations mainly emanating from bivalve farming. Measurements will be made by moored instrumentation.

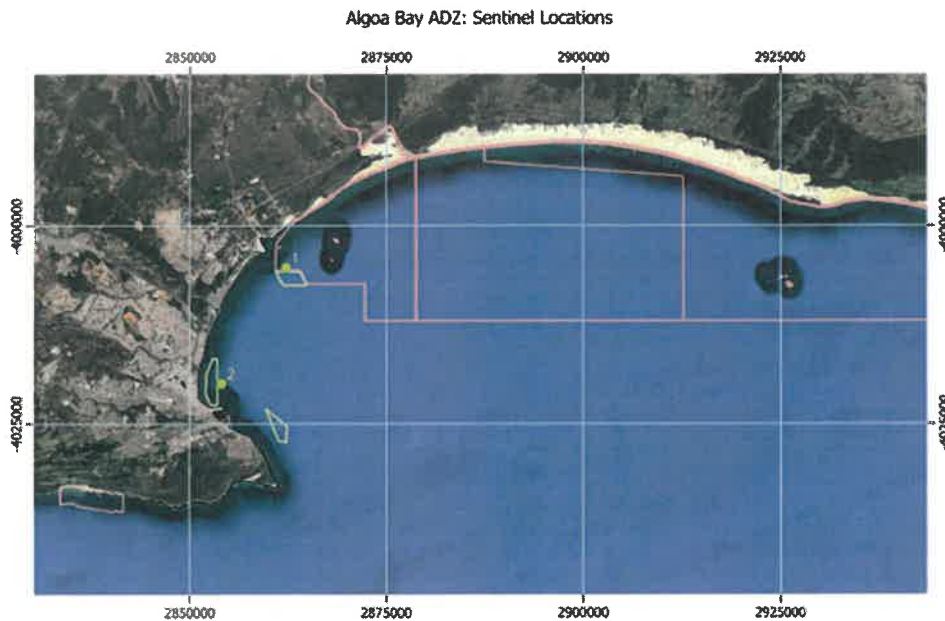


Figure 4-4: Algoa Bay sea-based aquaculture precincts. Sentinel stations 1 and 2 locations in the ADZ. Map projection is WGS 84 Pseudo Mercator (EPSG:3857).

#### 4.6 Survey frequency

The following survey frequencies are initially required:

- Baseline of all measurements at all sites prior to commencement of farm installation including Precinct 6 although it is currently farmed,
- Seabed monitoring in all precincts annually,
- Water quality monitoring biannually seasonally during stratified and mixed water column conditions. Surveys are to be conducted at weekly intervals over six weeks during each of the survey periods to capture shorter term variability,
- Sentinel sites continuous over life of aquaculture operations.

Following reviews of monitoring results, the monitoring schedule can be adjusted and intervals between monitoring increased. For an example seabed monitoring as if the initial period of survey verifies modelling prediction intervals that can be extended to three years. Survey frequencies will also need reviewing on changes in farms such as increased production.

#### 4.7 Survey methods

The survey methods to be applied closely follow those specified in DFFE (2022) for the Saldanha Bay ADZ. This to meet similarity between the monitoring initiatives as mentioned above but also because the methods described there are fully adequate for the monitoring objectives.

#### 4.7.1 Seabed monitoring

There are two components: surveys of unconsolidated sediments and reefs. Procedures are briefly described below.

##### 4.7.1.1 Unconsolidated sediments

Sediment samples are to be preferentially retrieved by box core such as GOMEX (<https://oceaninstruments.com/product/gmx-25-gomex-box-corer-standard/>) or alternatively van Veen grab. The former performs slightly better in keeping the sediment surface intact. These sampling instruments should not be interchangeable, if sampling commences with box coring, then it should continue with this throughout the programme. If changes in instrumentation are unavoidable careful calibration between samplers should be done to give conversion factors.

Note that DFFE (2022) correctly prefers diver sampling over remote sampling, but water depths may be problematic possibly requiring decompression and, if predictions on finfish cages attracting large predators are correct, heightened human health risks.

Three replicate samples are to be taken at each sample site. To ensure independence between replicates these should be at least 10m apart. On retrieval the surface of the core sample is to be examined for possible disruptions from sampling. It is important that these are minimal. The excess surface water is then to be siphoned off and discarded. The sediment surface with a centimetre scale and station number label is to be photographed. For each sample replicate separate subsamples for S<sup>2-</sup>, trace metal, particle size and organic carbon and nitrogen analyses are then drawn. The former is restricted to the upper 2cm of the sediment sample and is drawn through a cut-off syringe which is sealed to prevent air exposure. These subsamples are stored cooled for same day, preferably, transfer to shore based SANAS accredited analytical facilities.

The balances of the impact station box core replicate samples are then composited and the macrobenthos extracted by screening through a 1mm aperture sieve. Reference station replicate samples are not composited for analyses. The sieved samples are transferred to clear externally and internally labelled sample jars and preserved in 5% buffered formalin initially and alcohol thereafter for analyses of macrofauna biomass and taxon composition. Taxa are to be identified to the lowest pragmatic level and subjected to uni- and multivariate analyses, including derivations the Warwick Statistic from Abundance /Biomass curves, and estimations of ITI and AMBI indices.

##### 4.7.1.2 Reef (applies to Precinct 1)<sup>2</sup>

A shot-line must be deployed at the selected reef station (that shown in Figure 4-1 is provisional). Two divers are deployed to video three 10m long transects radiating from the shot line with the camera ~50cm off the seafloor, whilst the other diver conducts at least ten photo-quadrats (0.04 m<sup>2</sup>) on reef habitat in the vicinity of the shot-line base. At least 2 - 3 photos must be taken of each quadrat to ensure that the best possible focus is achieved, as

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<sup>2</sup> Modified from DFFE (2022)



well as to account for varying depths of fields of each photograph. Should conditions require the use of the flash or a torch, all photos should be taken using these. Additionally, qualitative collection of biota should be undertaken at all sites to aid in the identification of cryptic biota observed in video transects and photo-quadrats. At a minimum, presence/absence data is to be extracted from the collection of photographs and video footage.

However, should conditions and photo quality allow, it is desirable for analysis to include quantitative abundance or percentage cover data. Multivariate statistical analysis should be undertaken to quantitatively describe reef and reef dependent biota. General observations on presence and abundance motile fauna such as fish, larger crustaceans are to be made. Data are to be processed through PRIMER and mapped to allow comparisons between surveys. Reef characteristics such as location, orientation, water depth, and current forces generally give reefs unique features and therefore it is difficult to make comparisons between impact and control sites. Thus, unless a nearby and similarly structured reef can be located, estimations of influences from aquaculture operations will be made across time but not time and space.

#### **4.7.2 Water column**

An internally logging, factory calibrated, CTD with added sensors for chlorophyll fluorescence, as a proxy for phytoplankton biomass, and dissolved oxygen, also by fluorescence, is to be used for water column profiling. Profiles are to be taken as rapidly as possible down the transect stations shown in Figure 4-1, Figure 4-2, and Figure 4-3. At each station the CTD is to be deployed and held at ~2m depth for ~60 seconds to allow sensors to adjust, raised back to the surface but not through the surface and then allowed to descend through the water column at ~0.5 m/s. Within ~1 m of the seabed, determined by a weight suspended 1 m below the CTD frame, the CTD is to be held in place for ~60 seconds and then retrieved to the surface at ~0.5 m/s. Data are to be inspected on completion of each of the transects and the line repeated if faulty. Additionally, profiles are to be obtained at each of the sentinel stations (Figure 4-4) to aid in verification checks on sentinel mooring data and provide context for their measurements across the water column.

#### **4.7.3 Sentinel stations**

Bottom mounted CTD moorings are to be established at each of the sentinel sites (Figure 4-4) to measure near seabed, within 1m, dissolved oxygen concentrations, temperature, and salinity over time. The temperature measurements are required for estimation of apparent oxygen anomalies and salinity for water mass identification through T/S relationships.

Instrumentation is to be protected as far as practically possible from overgrowth by biofouling and switched with duplicate instrumentation to allow recalibrations at monthly service intervals.

## 5 Comparisons with thresholds

Exceedances of set thresholds should instigate management interventions that seek to ameliorate the condition. The identified thresholds for sediment oxic state, trace metals and nitrification (section 4.4) are inherently precautionary aimed at preventing serious deleterious effects in receptors. Monitoring changes in benthic macrofauna communities is somewhat different as by the time change is detected the damage has been done and the focus is on preventing or mitigating further deterioration. In both cases accurate interventions are required. Examples in aquaculture include changes in stocking density, allowing sites to lie fallow for periods, changing feeding regimes in finfish, avoiding metal based antibiofouling systems. The thresholds for avoiding such interventions are discussed below. All are summarised from DFFE (2022).

### 5.1 Sediments

It is desirable that sediment bodies outside of the farm AZEs are not affected to the extent that organic enrichment exceeds the Oxidic B status. The exceedance thresholds as shown in Table 4-1 are:

- Redox is  $> -50$  mV.
- $S^{2-}$  is  $<250 \mu M$ .

Additionally:

- Shannon-Wiener diversity index is  $>3$ .
- The Warwick statistics are neutral or positive,
- Infaunal Trophic Index is  $>25$ , and
- Adjusted AMBI should be  $<3.0$ .

Excepting the Warwick statistic testing of survey data against the above is robustly done by single sample T tests whereby the null hypothesis ( $H_0$ ) is that test data meet or are within the thresholds and the alternative hypothesis ( $H_A$ ) that the test data do not meet the thresholds. Rejection of  $H_0$  should invoke management action. Initially requiring comparisons against appropriate control site data. If still miscreant, further surveys to determine the scale of effects and the need/desirability of an expanded or repositioned farm AFE can be needed. Gross transgressions or continuous build up in the metrics can require reduced stocking levels or similar as suggested above.

Trace metal build-ups in sediments are to be treated similarly with the 95<sup>th</sup> percentile of precinct impact station total Cu and Zn concentrations at any survey date to be within the sediment quality guidelines for Cu not to exceed 34 mg/kg and total zinc not to exceed 150 mg/kg.

Over and above the biota indices, specifying threshold of change limits for benthos for macrobenthos community structure is difficult and may be subjective. For the current purposes, marked changes from control station community structure as shown by univariate and multivariate comparisons should lead to management interventions.

## 5.2 Water column

Applicable water quality guidelines are that total ammonia nitrogen should not exceed 600  $\mu$ g/l while near seabed dissolved oxygen should be above the hypoxia limit (2 ml/l) and/or the measured median concentration should exceed the 20th percentile of the control site data.

There is no guideline for chlorophyll and its main application is to understand the extent, if any, of the grazing effects of bivalve rearing systems and downstream effects of nitrification.

## 6 References

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## 7 Appendix: Sample site georeferences.

Map projection in all cases is WGS 84 Pseudo Mercator (EPSG:3857).

### 7.1 Impact stations within precincts

#### 7.1.1 Precinct 1

Stn Ref	X	Y
1a	2859947	-4023539
1b	2860248	-4024246
1c	2861070	-4024972
1d	2861300	-4024821
1e	28614995	-4024998
1f	2861734	-4025175
1g	2862087	-4025396
1h	2862202	-4025688
1i	2862114	-4026139
1j	2861442	-4026581

#### 7.1.2 Precinct 6

Stn Ref	X	Y
6a	2853094	-4017455
6b	2852634	-4018003
6c	2852935	-4018127
6d	2852563	-4018657
6e	2852227	-4019188
6f	2852475	-4019666
6g	2853235	-4021470
6h	2852369	-4021434
6i	2852758	-4022354
6j	2853041	-4022000

#### 7.1.3 Precinct 7

Stn Ref	X	Y
7a	2861261	-4005790
7b	2861513	-4006095
7c	2861716	-4005963
7d	2862083	-4006056
7e	2863639	-4005839
7f	2862671	-4006378
7g	2862313	-4006608
7h	2862087	-4007073
7i	2862008	-4007378
7j	2863294	-4006723
7k	2863246	-4007143
7l	2863250	-4007356
7m	2862911	-4006889
7n	2863591	-4006821
7o	2863723	-4006967
7p	2863962	-4007223
7q	2863878	-4007431
7r	2864440	-4007311
7s	2864015	-4006878
7t	2863343	-4006312

### 7.2 Control stations

StnRef	X	Y
1a	2859391	-4023065
1b	2859781	-4024567
1c	2862454	-4024872
6a	2853171	-4016302
6b	2853875	-4019272
6c	2851737	-4020842
7a	2860647	-4006243
7b	2862267	-4008126
7c	2864414	-4007821

#### 7.2.1 Precinct 1 reef area provisional station

Stn Ref	X	Y
Reef-1	2861180	-4025690

### 7.3 CTD transect stations

#### 7.3.1 Precinct 1

Stn Ref	X	Y
T1-1	2860397	-4023497
T1-2	2860945	-4024576
T1-3	2861441	-4025549
T1-4	2861865	-4026291
T1-5	2862388	-4027388

#### 7.3.2 Precinct 6

Stn Ref	X	Y
T6-1	2852031	-4017696
T6-2	2852562	-4019075
T6-3	2852880	-4019907
T6-4	2853163	-4020862
T6-5	2853623	-4021887

#### 7.3.3 Precinct 7

Stn Ref	X	Y
T7-1	2863612	-4005607
T7-2	2863240	-4006173
T7-3	2862966	-4006668
T7-4	2862683	-4007110
T7-5	2862409	-4007535
T7-6	2862241	-4007773

### 7.4 Sentinel stations

Lable	Stn Ref	X	Y
Sentinel N	1	2862286	-4005044
Sentinel S	2	2854633	-4019995

## 3. VIRTUAL COMPULSORY BRIEFING SESSION

3.1 To ensure that prospective bidders understand what is required from them with regards to this tender, they must attend of a compulsory Briefing Session.

3.2 The Briefing Session will take place as follows:

- 24 October 2024 at 10:00

3.3 The link for the Briefing Session can be requested via email provided in the table below:

Name	Email address
Mr Lwandisa Hoza	MLRFtenders@dffe.gov.za
Ms Talitha Bikani	

*\*Bidders should use "MLRF211/24: Briefing Session" as the subject of the email of requesting a link for the briefing session.*

## 4. SCOPE AND EXTENT OF WORK

### 4.1 Baseline Survey

The Monitoring Plan (2.6) for Algoa Bay Aquaculture Development Zone (ADZ) outlines the requirements for conducting the baseline survey, this must include the ecological indicators as required in the Monitoring Plan; a once off baseline survey of measurements at all sites prior to commencement of the installation of farm infrastructure, including Algoa 6 although there is already activity within this precinct. Macrobenthos, geotechnical and geochemical samples and analysis to determine the baseline of the sediments. The Ecological indicators should be sampled from the following 49 sites:

Algoa 1: 13 sampling stations which include 1 reef site

Algoa 6: 13 sampling stations

Algoa 7: 23 sampling stations

Macrobenthic analysis: A total of 48 marine sediment samples (the remaining 16 stations are CTD stations and should be sampled for accordingly for CTD analysis) should contain at least 5-10 litres of sediment sampled for macrobenthos analysis and must be identified and sorted into broad taxonomic groups and identified into the lowest taxonomic resolution and counted.

Geotechnical assessment: grain size and porosity of a total of 48 marine sediment samples to be collected and analysed. Sediment particle size distribution must be determined by dry sieving and porosity must be calculated from weight loss of wet sediment on drying at 60°C.

Geochemical analysis: 48 marine sediment samples for Total Organic Carbon and Nitrogen (TOC/N) by elemental analysis (not weight loss on ignition) should be undertaken. These samples should also be tested for Copper (Cu), Aluminium (Al) and Zinc (Zn) using the Inductively Coupled Plasma (ICP) optical spectrometer after strong acid extraction and microwave digestion (total fraction). Samples to be taken to determine the baseline benthic macrofaunal community species diversity, richness and biomass, and indices indicative of oxygen stress should be analysed. As well as determining the near-bottom oxygen concentration on the aquaculture site.

This design and appropriate indicator variables and related thresholds allow real environmental change attributable to farm activities to be identified in a naturally variable environment. The service provider must additionally conduct a desktop review of existing monitoring programs in the Bay to identify if there are overlaps between monitoring programs already in place and to identify any potential collaborations to avoid duplication of work effort towards achieving the above-mentioned deliverables.

### 4.2 Benthic macrofauna survey

The Monitoring Plan for the Algoa Bay ADZ outlines the detailed requirements for conducting the benthic macrofauna survey, this includes a full macrofauna analysis should be taken to the species level or the

lowest possible taxonomic level (both infauna and epifauna), TOC/N, granularity and porosity at shellfish and finfish monitoring sites/sampling stations. Three replicate samples must be taken from each sample site ( $n=49 \times 3 = 147$ ); to ensure independence between replicates these should be at least 10m apart. This should also include analysis of heavy metals Zn, Cu and Al. Seabed monitoring in all precincts must be taken once-off within the project duration (i.e. two years post baseline survey and not annually as indicated in the Monitoring Plan). It is highly recommended that all bidders read **2.6** to obtain detailed information on the scope and extent of work.

#### **4.3 Ecological Monitoring survey**

Annual chemical transect survey of sulfide ( $S^{2-}$ ) to establish the status of the oxygen environment of the aquaculture precincts. Chemical characteristics to be collected during sampling by divers along a transect to reflect farm impact over a total of 16 sampling stations across all three precincts as indicated in the Monitoring Plan. In instances where farming structures fall over hard substrata, alternative means for monitoring the health of the benthic environment in these areas (i.e. video and photo-quadrats) should be implemented.

- The sediment geochemical variables of total sulfides ( $S^{2-}$ ; which is a composite of  $H_2S$ ,  $HS^-$  and  $S^{2-}$ ) and redox potential (Eh).  $S^{2-}$  concentrations are to be measured by methylene blue colorimetry or UV spectrophotometry as ion selective probes have been shown to produce variable results. Redox potential measurements should be used in parallel with this method so that sample sites approaching hypoxia and potentially with low  $S^{2-}$  concentrations can be identified.
- Visual and odour characteristics of seabed sediments.
- Surficial sediment geochemical characteristics comprising TOC/N, Cu, Zn and Al concentrations. Aluminium (Al) is employed as a normaliser accounting for sediment grain size variations as high Al concentrations are characteristic of aluminosilicates in silt and clay sediments.
- Sediment geotechnical characteristics (particle size distributions, structure, porosity).
- Benthic macrofaunal community species diversity, richness and biomass, and indices indicative of oxygen stress.
- Near-bottom oxygen concentration.
- Upper water column chlorophyll concentration (fluorometric).

It is highly recommended that all bidders read **2.6** in order to obtain detailed information on the scope and extent of work.

#### **4.4 Epifauna reef community surveys**

A shot-line must be deployed at the selected reef station, two divers must be deployed to video three 10m long transects radiating from the shot line with the camera ~50cm off the seafloor, whilst the other diver conducts at least ten photo-quadrats (0.04 m<sup>2</sup>) on reef habitat in the vicinity of the shot-line base. At a minimum, presence/absence data is to be extracted from the collection of photographs and video footage. Reef community surveys to determine the species community composition and diversity found on hard substrata in Algoa 1 and to determine the potential impact of aquaculture on these communities to be undertaken every three years. Epifaunal reef community monitoring in Algoa 1 precinct must be taken once-off within the project duration (i.e. within the first twelve months of the contract). It is highly recommended that all bidders read **2.6** to obtain detailed information on the scope and extent of work.

#### **4.5 Annual Synoptic Survey**

Water quality monitoring is to be undertaken seasonally during stratified and mixed water column conditions every six (6) month during each of the survey period. An internally logging factory-calibrated CTD with added sensors for chlorophyll fluorescence, as a proxy for phytoplankton biomass, and optical dissolved oxygen, is to be used for water column profiling at the 16 CTD transect stations including the two sentinel stations. Surface water (1m) samples subjected to fluorometric analysis of Chlorophyll should be used to calibrate (from two sites) in situ fluorescence profiles. Profiles are to be obtained at each of the sentinel stations to aid in verification checks on sentinel mooring data and provide context for their measurements across the water column. Bottom mounted CTD moorings are to be established at each of the two sentinel sites to measure near-seabed, within 1m, dissolved oxygen concentrations, temperature, and salinity over time. The temperature measurements are required for estimation of apparent oxygen anomalies and salinity for water mass identification through T/S relationships. It is highly recommended that all bidders read **2.6** to obtain detailed information on the scope and extent of work.

#### **4.6 Servicing of bottom moored instruments**

Deployment, retrieval and servicing of bottom moorings at the two sentinel sites is to be undertaken. This includes the cleaning of the instruments of biofouling organisms and changing of the batteries, if required. This activity should be undertaken by means of qualified (according to the Department of Employment and Labour) and compliant scuba divers for the below mentioned oceanographic equipment servicing, every six (6) to eight (8) weeks (an estimated twenty-six (26) servicing intervals) distributed over the thirty-six (36) months contract period. It should be noted that if less frequent servicing intervals are required then this can be amended during the contract period to save on costs. Service providers should provide credible references of previous work which is in line with servicing and retrieval of the below type of equipment. The appointed service provider is to supply two oxygen sensors and one nitrate sensor and two suitable moorings (height 1m above the seafloor) for the deployment at sentinel stations, spare sensors to be made

available in the event of loss of a sensor or if the sensor requires servicing and removal from the water for extended periods of time. Sensors should be installed for continuous monitoring and data logging. The sensors to be deployed must be according to the below specifications to allow for comparison of data between ADZ's:

- Two oxygen sensors {JFE Advantech Rinko-W (with wiper) Oxygen optical sensors} to be serviced during each service interval (26). These can be protected from biofouling by placing the sensor in protective pvc covers, enveloped in nylon stocking as is the current practice for sensors deployed in Saldanha Bay ADZ. Nylon stocking and batteries to be replaced at each service interval, which encases the oxygen sensors as required.
- One nitrate sensor (SUNA) to be serviced during each service interval (26) along with the collection of a 100ml water sample before removal of instrument and analysed immediately as calibration factors for the nitrate sensor.

Instrument to be protected as far as practically possible from overgrowth by biofouling. It is highly recommended that all bidders read **2.6** to obtain detailed information on the scope and extent of work.

#### **4.7 Biofouling Management Strategy**

Drafting of a Biofouling Management Strategy for disposal of biofouling waste, to be implemented by the operators. This should include a review of the current reporting format of this information on the existing Farm Monitoring Report template and update this section of the report if required. The control of biofouling in aquaculture is achieved through the avoidance of natural recruitment, physical removal and the use of antifoulants which should be considered in the strategy. There are existing reports such as the Biofouling species identification reports (non-quantitative data) and a Draft Biofouling Strategy for the Saldanha Bay ADZ which can be used as a guideline for the development of the strategy, which will be shared after the appointment. International examples should be used to inform the development of the strategy.

#### **4.8 Quarterly Environmental reporting**

Drafting of Quarterly Environmental Sampling Reports, over the durations of the contract period, should be based on current monitoring practices being undertaken in Saldanha Bay ADZ, and can be used as a template in line with the scope of these ToR. The report which will be utilised as a template will be shared with the service provider upon appointment but is available on request to all bidders. These reports are to be submitted to the Aquaculture Management Committee (AMC) in a format approved by the MLRF. The Quarterly Environmental Sampling Reports detail the monitoring surveys undertaken in terms of this appointment for the Algoa Bay ADZ. Information on the status and nature of sampling as well as the status of the sampling planned in the upcoming quarter will be documented in quarterly Environmental Monitoring reports.

#### **4.9 Digital invertebrate taxonomic reference library**

Development and maintenance of a digital invertebrate taxonomic reference library to allow comparison between service providers for the lifespan of the ADZ is required. The digital library template is available to service providers on request. The reference library should be presented in an electronic and hard copy booklet format and should allow for continued updating.

#### **4.10 Endangered, Threatened and Protected species data**

Visual survey of the presence or absence of Endangered, Threatened and Protected species (as per the Endangered, Threatened and Protected species lists) to be recorded in existing excel spread sheet template. Visual survey to be conducted every six (6) to eight (8) weeks within the three precincts of the ADZ from a boat, during the servicing of the bottom moored instruments. Data to be summarised into text and findings to be reported in the Quarterly Environmental Reporting. Species identification to be facilitated using existing species ID cards and reference material, templates for species counts will be made available on appointment. Summary of the data findings to be included into text to be incorporated into the DFFE's Aquaculture Yearbook.

#### **4.11 Impact Assessment**

Assess the existing land-based oyster holding facility's effluent discharge by assessing the risk and the impacts of such a facility on the marine environment. The assessment is required to collect data with regards to the requirements for General Discharge Authorisations for an oyster holding facility as per the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) requirements. Analyse of samples from influent (water coming into the facility), effluent (discharge waters leaving the facility) and a control located in the receiving environment should be monitored for constituents of concern i.e. pH, oxygen, TSS, temperature etc. The frequency of sampling should coincide with the requirements of the GDA regulations.

#### **4.12 Project management duties**

Bi-monthly (every two months) progress as well as the inception and close out meetings will be held virtually. Meeting minutes to be drafted by the service provider and approved by the MLRF Project Manager. Bi-monthly progress reports should be submitted to the MLRF Project Manager along with the invoice.

Project Manager included in the proposal must play an active role in the day-to-day oversight of the project and should indicate the role which the senior manager on the proposal will play on the project.



## 5. EXPECTED DELIVERABLES / OUTCOMES

	Deliverable	Frequency
5.1	Baseline Survey	Once off survey conducted at all stations (49) which includes the reef area. Including the analysis of 49 samples of 5 – 10 L for Macrobenthic analysis, Geotechnical assessment and Geochemical analysis and the Baseline Assessment Report to be drafted.
5.2	Benthic Macrofauna survey and report every three (3) years	One (1) survey to be conducted (2027), samples to be analysed, report to be drafted and presentation to be given to the Algoa Bay Aquaculture Management Committee and the Consultative Forum (in separate virtual meetings) for their noting.  Note: Survey to be undertaken two years post baseline survey and not annually as indicated in the Monitoring Plan.
5.3	Ecological Monitoring survey	Three (3) surveys to be conducted (2025, 2026 and 2027), samples to be analysed, three reports to be drafted and three presentations to be given to the Algoa Bay Aquaculture Management Committee and the Consultative Forum (in six separate virtual meetings) for their noting.
5.4	Annual Synoptic Survey	Four (4) surveys per annum to be undertaken seasonally, during stratified and mixed water column conditions collected during the surveys conducted at weekly intervals over six weeks during each of the survey periods to capture shorter term variability and report two times a year.
5.5	Epifauna reef community survey	One (1) survey to be undertaken (2025) within the first year of the contract, samples to be analysed, reports to be drafted and presentation to be given to the Algoa Bay Aquaculture Management Committee and the Consultative Forum (in two separate virtual meetings) for their noting.
5.6	Servicing of bottom moored instruments	Twenty-six (26) surveys of servicing bottom moored instruments, details of which to be captured in the project progress reports as well as in the Quarterly Environmental Reports. Oxygen and nitrate sensors to be supplied by service provider as well as two moorings for the sentinel sites.
5.7	Biofouling Management Strategy	One (1) report to be drafted for the management of biofouling on aquaculture infrastructure. Review and amendment of the Farm Monitoring Report template if required.
5.8	Quarterly Environmental Reports	Four (4) quarterly reports drafted per annum during the period of appointment.
5.9	Digital invertebrate taxonomic reference library	Electronic and hard copy data base to be maintained during the lifetime of the appointment period.
5.10	Endangered, Threatened and Protected species monitoring	Data collection for species data every six (6) to eight (8) weeks during the servicing of the bottom moored instruments, via survey of all three precincts within the ADZ while on the water. The reporting of ETP species data to be reported in the Quarterly Environmental Reports. Summary of the findings to be incorporated into the DFFE Aquaculture yearbook.
5.11	Impact Assessment	Collection over 12 sample trips and analysis of influent (incoming seawater), effluent (discharge seawater) and point of discharge at the end

		of pipeline within the receiving environment samples to be collected for constituents of concern to the bivalve industry and draft a report of the findings after analysis against the GDA requirements as these pertain to the aquaculture industry.
5.12	Project management duties	One (1) inception meeting, one (1) project closure meeting, then bi-monthly meetings attended virtually, all meeting minutes drafted by service provider, bi-monthly progress reports to be submitted along with an invoice for payment.

## **6. PERIOD / DURATION OF APPOINTMENT**

- 6.1. The contract with the appointed Service Provider (SP) will run for a period of thirty-six (36) months and will commence as agreed in the Memorandum of Agreement (MOA) and upon the issuing of the purchase order.

## **7. COSTING / COMPREHENSIVE BUDGET**

- 7.1. A comprehensive costing must be provided in a separate envelope inclusive of all disbursement costs and related expenditures inclusive of Value Added Tax (VAT). Refer to additional pricing schedule for further detail and SBD 3.3 to be completed. The SP must quote for all activities and these should be quoted in South African currency.
- 7.2. The MLRF shall not pay for any unproductive or duplicated time spent by the SP on any assignment because of staff changes, outsourcing or re-drafting of reports due to errors, corrections or incorrect/incomplete findings.
- 7.3. The MLRF reserves the right to negotiate with one or more preferred bidder(s) identified in the evaluation process, regarding any terms and conditions, including prices without offering the same opportunity to any other bidder(s) who have not been awarded the status of the preferred bidder(s).
- 7.4. Prices should be quoted as per the pricing schedule below. Price will be adjudicated on the total only:

### **Refer to Annexure B1 Pricing Schedule**

## **8. EVALUATION METHOD**

- 8.1. The evaluation for this bid will be carried out in four (4) phases:
- Phase 1: Pre-compliance or Initial screening
  - Phase 2: Mandatory Requirement
  - Phase 3: Due Diligence
  - Phase 4: Price and Specific goals

## 8.2 PHASE 1: PRE-COMPLIANCE OR INITIAL SCREENING

- 8.2.1 During this phase bid documents will be reviewed to determine compliance with Supply Chain Management Standard Bidding Documents and any other required returnable tax matters and whether the Central Data Base (CSD) report has been submitted with the bid documents at the closing date and time of the bid. Bids which do not satisfy the compliance criteria will not be evaluated further.
- 8.2.2 The bid proposal will be screened for compliance with administrative requirements as indicated below:

Item No.	Administrative Requirements	Check/Compliance	Non-submission may result in disqualification?
1	SCM - SBD 1 - Invitation to Bid	Completed and signed	**NO
2	SCM - SBD 2 - Tax Clearance Certificate Requirements	CSD registration number/SARS PIN and CSD summary report	**NO
3	SCM - SBD 3.3 – Pricing Schedule	Completed and signed	**NO
4	SCM - NEW SBD 4 - Declaration of Interest	Completed and signed	**NO
5	SCM - NEW SBD 6.1 - Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022	Completed and signed.	**NO
6	In case of bids where Consortia / Joint Ventures, Consortia agreement signed by both parties must be submitted with bid proposal	JV agreement completed and signed, if applicable	**NO

**\*\*NO** – MLRF reserves the right to send a request for information (RFI) to the service provider in the event of non-submission or incomplete documentation and to request a response within seven (7) days after the date of sending the RFI. If the documents are not submitted or completed in full within seven (7) days, the MLRF will reject proposals and these will not be evaluated further for Phase 2.

## 8.3. PHASE 2: MANDATORY REQUIREMENTS

- 8.3.1. The following table must be completed by the bidder by answering YES OR NO and attach proof.
- 8.3.2. Only bidders who achieve a “Yes” and attach required proof for all mandatory requirements will proceed for evaluation to Phase 3.

REQUIREMENT	REQUIRED PROOF TO BE SUBMITTED WITH BID	COMPLY: YES OR NO
The Project leader is registered with the South African Council for Natural Scientific Professionals (SACNASP) as an Aquatic science professional (marine science) or relevant field of practise covering the scope of work outlined in SECTION 4 above.	SACNASP registration number, certificate / annual subscription	
The Bidder has conducted at least two marine environmental monitoring projects of a multi stakeholder nature with experience as a senior Project manager/ Senior natural marine scientist.	Company Profile/ CV of Project leader	
The Project Teams members or individuals have demonstrable knowledge in marine environmental monitoring and aquaculture projects required to draft the reports listed above or be supported by a team with the required skills.	CV of Project team members	
The Project leader has at least a MSc in Marine Natural Sciences.	MSc Degree	
Certified Scientific Dive Team of at least five (5) people, one supervisor, one designated medical practitioner (level 2: on call) and three (3) divers with minimum Class 4 Registration. Note pricing should be equivalent to a Class registration for all divers. Full compliance with labour requirements e.g. Medicals up to date etc.  Service provider to clearly indicate who is the supervisor, medical practitioner and divers.	Valid Department of Labour certification together with records of medical in-date	
Three years of verifiable experience of at least a year per project with development of monitoring protocols in aquaculture / marine environment/research	Signed reference letter/s from client/s on successful completion of work on the development of monitoring protocols in aquaculture/marine environment / research.  Letter/s to reflect the duration of the project and to have contactable references.	

#### 8.4. PHASE 3: DUE DILIGENCE

- 8.4.1 The Department shall have the right to perform due-diligence exercise during the evaluation process of this bid and to reject proposals that do not comply with the requirements.
- 8.4.2 Only bid proposals that meet Phase one (1) and two (2) will be considered for evaluation for due diligence.

- 8.4.3 The MLRF will perform due diligence on:
- 8.4.3.1 Mandatory requirements on 8.3.2
  - 8.4.3.2 Premises of the bidder
- 8.4.4 Live demonstrations and/or site inspections will be performed to confirm the ability of the bidder to execute the project and the availability of sufficient personnel, working equipment, and other resources to deliver the required services.
- 8.4.5 The MLRF will communicate the dates to the bidder/s beforehand. Bidders:
- 8.4.5.1 Provide the representative with access to the offices of the bidder where the services will be offered
  - 8.4.5.2 Provide the MLRF with the documents that will be required to support management responses on the due diligence questionnaire form. The MLRF will indicate the required documents beforehand
  - 8.4.5.3 To have the personnel who will be responsible for the demonstrations that will be required to be available.
  - 8.4.5.4 To have any other information or staff required for MLRF to successfully perform the due diligence.
  - 8.4.5.5 To provide the MLRF before the date of the due diligence with the contact details of two people that will be contacted on the day of the due diligence.
  - 8.4.5.6 To reserve two (2) parking bays for the representative of the MLRF.
- 8.4.6 Bidder/s who do not demonstrate the ability to deliver the required services and the availability of resources will NOT be evaluated further

## 8.5 PHASE 4: PRICING AND SPECIFIC GOALS

- 8.5.1 Only bid proposals that meet phase one (1), two (2) and three (3) will be evaluated on price and specific goals.
- 8.5.2 An evaluation of Price and Specific Goals Preference points on the suppliers that have successfully qualified to this stage of evaluation.
- 8.5.3 **Calculation of points for price** - The Preferential Procurement Policy Framework Act (PPPFA) prescribes that the lowest acceptable bid will score 80 points (for tenders under R50m) or 90 points (for tenders above R50m) for price. Suppliers that quoted higher prices will score lower points for price on a pro-rata basis.
- 8.5.4 The 80/20 as an appropriate preference point system will be used in the evaluation and adjudication of this quote. However, it must be extended that the lowest acceptable quote will be used to determine the applicable preference point system as per regulation (Section 3(2)(b) of the Preferential Procurement Regulations (PPR) 2022, which states: "If it is unclear which preference point system will be applicable,

that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable proposal will be used to determine the applicable preference point system". Therefore, either 80 or 90 points, depending on the rand value of the proposal, will be awarded to the supplier who offers the lowest price, and proportionately fewer points are awarded to those with higher prices. Either 20 or 10 points are then available as preference points for Specific Goals, as applicable. The contract will be awarded to the supplier that scores the highest total number of adjudication points per category.

### Calculating points for Specific Goals

8.5.5 Points will be awarded to a supplier for specific goals in accordance with the table below:

<b>A.</b>	<b>PRICE</b>	<b>80</b>
<b>B.</b>	<b>Specific Goal</b>	<b>Number of points (20)</b>
	51% black ownership	8
	50% women ownership	4
	Youth ownership	4
	Disability	4
	Non-compliant contributor	0

\*The definitions of the above specific goals are as per the PPR policy of the MLRF.

8.5.6 The SCM unit of the MLRF will allocate preferential points (Specific Goals) to each company for its contribution towards empowerment of the black designated groups as prescribed in the Preferential Procurement Regulations of 2022, women, people with disabilities, youth as well as local economic development.

8.5.7 A supplier will not be disqualified from the quotation process if the suppliers does not submit supporting documents substantiating the specific goals preference points claimed or is a non-compliant contributor. Such suppliers will score 0 for Specific Goals.

8.5.8 Suppliers will be subject to SCM conditions of the Department – MLRF and the Preferential Procurement Regulations, 2022 issued in terms of section 5 of the Preferential Procurement Policy Framework Act (Act No 5 of 2000) (PPPFA).

8.5.9 The PPPFA prescribes that the lowest acceptable bid will score 80 or 90 points for price (as explained above, depending on whether the bid prices is more or less than R50million). Suppliers that quoted higher prices will score lower points for price on a pro-rata basis.

- 8.5.10 The contract will be awarded to the supplier scoring the highest points subject to section 2(1) (f) of the PPPFA, 2000.

## **9. BID SUBMISSION REQUIREMENTS**

- 9.1 **All completed documentation must be returned to the Marine Living Resources Fund (MLRF), the entity of the Department of Forestry, Fisheries and the Environment (DFFE) at or before 11:00 on the 11<sup>th</sup> of November 2024. The location of the drop off is: Tender Box, Ground Floor, Foretrust Building, 2 Martin Hammerschlag Way, Cape Town, 8000.**

- 9.2 Bidders should ensure that the following submission requirements, which will be needed for evaluation purposes are included in their bid proposal and are as follows:

- 9.2.1 The SP must draft a table of content which will indicate where each document is located in the proposal.
- 9.2.2 The proposal shall consist of two parts, namely the technical bid (master and five (5) copies) and the pricing bid (master and five (5) copies).
- 9.2.3 Add documents that are required to be submitted with the bids. These documents include those included in Phase One (1) and Phase Two (2) of the evaluation criteria.
- 9.2.4 Completed table of mandatory requirements, as set out in the table in paragraph 8.3. 2 of this document, together with all necessary supporting documents and required documentary proof.
- 9.2.5 Standard bidding documents (SBD1, 2, 3.3, 4, and 6.1) completed and signed. A valid copy of the Tax Clearance Certificate/ Tax Compliance Status Pin issued by SARS to the supplier/copy of the Central Supplier Database (CSD)/ MA supplier Number must be submitted together with the bid.
- 9.2.6 In case of bids where Consortia / Joint Ventures / Sub-contractors are involved; such must be clearly indicated and each party must submit a separate copy of a valid Tax Clearance Certificate or copy of Tax Compliance Status Pin or CSD/ MAAA supplier Number together with the bid.
- 9.2.7 Certified copies of identity documents of directors and shareholders of the company.
- 9.2.8 Entity registration Certificate (e.g. CK1).
- 9.2.9 Letter of Authority to sign documents on behalf of the company.
- 9.2.10 B-BBEE Certificates or Sworn Affidavits.

## **10. SPECIAL CONDITIONS OF CONTRACT**

- 10.1 On appointment, the performance measures for the delivery of the agreed services will be closely monitored by MLRF.
- 10.2 The MLRF will not be held responsible for any costs incurred by the SPs during the preparation, presentation and submission of the proposal.
- 10.3 The Project Manager will be responsible for the management of the Memorandum of Agreement (MOA).

- 10.4 All the conditions specified in the General Conditions of Contract (GCC) will apply and where the conditions in the special conditions of contract contradict the conditions in the general conditions of contract, the special conditions of contract will prevail.
- 10.5 The bid proposals should be submitted with all required information containing technical information.
- 10.6 Travelling costs and time spent or incurred between home and office of the SP and the MLRF office will not be for the account of MLRF.
- 10.7 Poor or non-performance by the bidder will result in cancellation of the order and the MOA.
- 10.8 Should the service provider fail to perform, the MLRF reserves the right to cancel the appointment of such service provider immediately and without any notice.

## **11. PAYMENT TERMS**

- 11.1 The MLRF undertakes to pay out in full or as per deliverables within 30 (thirty) days all valid claims for work done to its satisfaction upon presentation of a substantiated claim and the required reports stipulated in special conditions. No payment will be made where there is outstanding information/work not submitted by the Service Provider/s until that outstanding information is submitted.
- 11.2 Payment by the MLRF shall be made by means of an electronic transfer into the SP's bank account.
- 11.3 Payment requirements:
- The successful Service Provider shall render services to the MLRF in accordance with the Project Plan and Project Scope.
  - The amounts are inclusive of VAT and all disbursements shall be paid in South African Rands.
  - The MLRF reserves the right to, after consultation with the successful Service Provider, increase, reduce or cancel the budget.
  - Disbursements of project funding will be agreed on for each project and disbursements will be made on agreed and verified deliverables and indicators (targets) that are included in the Project Plan.
  - The successful Service Provider shall provide the MLRF with an original tax invoice for the services rendered. Once the MLRF has approved such an invoice and is satisfied with the services rendered as outlined in the Project Plan, it will make payment to the successful Service Provider within 30 days of approval of such a request.
  - The successful Service Provider is required to submit the following documents with each invoice;
    - Acting letter of the manager of SP (if applicable)
    - Monthly/Period Project Progress Report
  - ALL INVOICES MUST ADDRESSED TO THE MLRF.



## 12. ENQUIRIES

12.1 Should you require any further information in this regard, please do not hesitate to email:

Name	Email address
Mr Lwandisa Hoza	<a href="mailto:MLRFtenders@dfre.gov.za">MLRFtenders@dfre.gov.za</a>
Ms Talitha Bikani	

*\*Bidders should use "MLRF211/24: Enquiries" as the subject of the email for all enquiries.*

# ANNEXURE 1



# forestry, fisheries & the environment

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

Private Bag X 447· PRETORIA ·0001· Environment House ·473 Steve Biko Road, Arcadia· PRETORIA

DDFE Reference: 14/12/16/3/3/1/2055

Enquiries: Ms Matthodi Mogorosi

Telephone: (012) 399 9388 E-mail: MMogorosi@environment.gov.za

Ms Zimasa Jika

Department of Forestry, Fisheries and the Environment: Aquaculture and Economic Development

Private Bag X2

VLAEBERG

8018

Telephone Number:

021 402 3116

Email Address:

[zjika@environment.gov.za](mailto:zjika@environment.gov.za)

PER MAIL / EMAIL

Dear Ms Jika

## RE-ISSUE OF THE ENVIRONMENTAL AUTHORISATION ISSUED ON 26 FEBRUARY 2020 WITH AMENDMENTS BASED ON THE APPEAL DECISION DATED 18 JUNE 2021 FOR THE ESTABLISHMENT OF THE SEA-BASED AQUACULTURE DEVELOPMENT ZONE (ADZ) IN ALGOA BAY WITHIN THE NELSON MANDELA BAY METROPOLITAN MUNICIPALITY IN THE EASTERN CAPE PROVINCE

The Environmental Authorisation (EA) issued for the abovementioned application by this Department on 26 February 2020 and the Appeal Decision issued by the Minister of Justice and Correctional Services on 18 June 2021, refer.

Please be advised that the Department has re-issued the EA dated 26 February 2020 with amendments (corrections to typographical errors) based on the Appeal Decision dated 18 June 2021. The amended Environmental Authorisation (EA) is attached herewith.

The Appeal Decision dated 18 June 2021 found that the applicant intends to farm only indigenous finfish species, according to the information presented in the Basic Assessment Report (BAR), the approved Environmental Management Programme (EMPr) and on page 6 of the EA. However, pages 7 and 20 of the EA dated 26 February 2020 erroneously referred to Meagre (*Agyrosomus regius*), an alien finfish species. The Minister viewed this as a typographical error that does not detract from the overall reasons for approving the application. The Chief Director: Integrated Environmental Authorisations was directed to remove all references to Meagre (*Agyrosomus regius*) in the EA issued on 26 February 2020, and thereafter issue the applicant with the amended EA. The EA dated 26 February 2020 has accordingly been amended to remove all references to Meagre (*Agyrosomus regius*).

The attached amended EA replaces the EA dated 26 February 2020. All further applications for amendment of the EA in terms of the EIA Regulations, 2014, as amended, must be lodged on the attached EA.

Yours faithfully

  
**Mr Sabelo Malaza**  
Chief Director: Integrated Environmental Authorisations  
Department of Forestry, Fisheries and the Environment  
Date: 27/09/2021

CC:	Dr B Clark	Anchor Research and Monitoring (Pty) Ltd	Tel: 021-701-3420	Email: <a href="mailto:vera@anchorenvironmental.co.za">vera@anchorenvironmental.co.za</a>
	Mr D Govender	Eastern Cape Department of Economic Development, Environmental Affairs and Tourism	Tel: 041-508-5800	Email: <a href="mailto:davalan.govender@dedea.gov.za">davalan.govender@dedea.gov.za</a>
	Mr J Mkosana	Nelson Mandela Bay Metropolitan Municipality	Tel: 041-506-5444	Email: <a href="mailto:JMkosana@mandelametro.gov.za">JMkosana@mandelametro.gov.za</a>



**forestry, fisheries  
& the environment**

Department:  
Forestry, Fisheries and the Environment  
REPUBLIC OF SOUTH AFRICA

## Environmental Authorisation

In terms of regulation 25 of the Environmental Impact Assessment Regulations, 2014

The establishment of the Sea Based Aquaculture Development Zone (ADZ) in Algoa Bay within  
the Nelson Mandela Bay Metropolitan Municipality in the Eastern Cape Province

Nelson Mandela Bay Metropolitan Municipality

Authorisation register number:	14/12/16/3/3/1/2055
Last amended:	Second issue
Holder of authorisation:	Department of Forestry, Fisheries and the Environment: Aquaculture and Economic Development
Location of activity:	EASTERN CAPE PROVINCE: Algoa Bay, Within Nelson Mandela Bay Metropolitan Municipality.

This environmental authorisation does not negate the holder of the authorisation's responsibility to comply with any other statutory requirements that may be applicable to the undertaking of the activity.

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## Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this environmental authorisation, that the applicant should be authorised to undertake the activities specified below.

Non-compliance with a condition of this environmental authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, 1998 (NEMA) and the Environmental Impact Assessment (EIA) regulations.

Details regarding the basis on which the Department reached this decision are set out in Annexure 1.

## Activities authorised

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No.107 of 1998) and the Environmental Impact Assessment Regulations, 2014 the Department hereby authorises –

**Department of Forestry, Fisheries and the Environment: Aquaculture and Economic Development**

(hereafter referred to as the holder of the authorisation)

with the following contact details –

Ms Zimasa Jika

Department of Forestry, Fisheries and the Environment: Aquaculture and Economic Development  
Private Bag X2

**VLAEBERG**

8018

Tel: 021 402 3116

Cell: 082 332 7943

E-mail: [zjika@environment.gov.za](mailto:zjika@environment.gov.za)

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to undertake the following activities (hereafter referred to as "the activity") indicated in Listing Notice 1 (GN R. 983):

Listed activities	Activity/Project description
<p><u>GN R983 Item 7:</u></p> <p>The development and related operation of facilities, infrastructure or structures for aquaculture of sea-based cage culture of finfish, crustaceans, reptiles, amphibians, molluscs, echinoderms and aquatic plants, where the facility, infrastructure or structures will have a production output exceeding 50 000 kg per annum (wet weight).</p>	<p>Production output for finfish is proposed as a phased approach, commencing with a pilot scale for 1000 tons/annum and potentially expanding over a period of 3-5 years to carrying capacity (species and location specific).</p>
<p><u>GN R983 Item 15:</u></p> <p>The development of structures in the coastal public property where the development footprint is bigger than 50 square metres</p>	<p>Structures associated with the fish cages, bivalve structures, and boat mooring facilities. The total ADZ area will exceed 50 square metres in coastal public property.</p>
<p><u>GN R983 Item 17:</u></p> <p>Development-</p> <p>(i) in the sea;</p> <p>in respect of-</p> <p>(e) infrastructure or structures with a development footprint of 50 square metres or more</p>	<p>Individual operators will moor the finfish cages and bivalve farming structures to the seafloor. The combined footprint is likely to exceed 50 square metres.</p>
<p><u>GN R983 Item 19A:</u></p> <p>The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—</p> <p>(iii) the sea</p>	<p>Individual operators will moor the finfish cages and bivalve farming structures to the seafloor. The combined volume to be deposited on the sea floor exceeds 5 cubic metres.</p>
<p><u>GN R983 Item 42:</u></p> <p>The expansion and related operation of facilities, infrastructure or structures for aquaculture of sea-</p>	<p>There is an existing oyster farming facility (Zwembesi Farms, Knysna Oyster Company)</p>

Listed activities	Activity/Project description
based cage culture of finfish, crustaceans, reptiles, amphibians, molluscs, echinoderms and aquatic plants where the annual production output of such facility, infrastructure or structures will be increased by 50 000 kg (wet weight) or more.	(Pty) Ltd), which will be expanded as part of the ADZ.
<u>GN R983 Item 54:</u> The expansion of facilities- (i) in the sea; in respect of- infrastructure or structures where the development footprint is expanded by 50 square metres or more,	There is an existing oyster farming facility (Zwembesi Farms, Knysna Oyster Company (Pty) Ltd), which will be expanded as part of the ADZ.
<u>GN R983 Item 67:</u> Phased activities for all activities— (i) listed in this Notice, which commenced on or after the effective date of this Notice similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices; where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.	The proposed development will occur in stages, where individual operators will contribute to the expansion of the ADZ as a whole.

as described in the Basic Assessment Report (BAR) dated October 2019 at:

**Algoa 1 Option 1 – Summerstrand**

Points	Latitude	Longitude
Centre	33° 58.610'S	25° 42.322'E
Corner points, clockwise from the northwest corner:	33° 57.440'S	25° 41.311'E
	33° 58.452'S	25° 42.781'E
	33° 59.409'S	25° 42.726'E
	33° 59.283'S	25° 42.630'E
	33° 59.296'S	25° 42.224'E

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**Algoa 6 – Port Elizabeth Harbour**

Points	Latitude	Longitude
Centre	33° 56.020'S	25° 37.651'E
Corner points, clockwise from the northwest corner	33° 54.624'S	25° 37.668'E
	33° 54.619'S	25° 37.979'E
	33° 57.258'S	25° 37.998'E
	33° 57.256'S	25° 37.519'E
	33° 56.571'S	25° 37.210'E
	33° 55.551'S	25° 37.272'E

**Algoa 7 – Ngqura Harbour**

Points	Latitude	Longitude
Centre	33° 50.105'S	25° 43.098'E
Corner points, clockwise from the northwest corner	33° 50.105'S	25° 43.098'E
	33° 49.722'S	25° 41.996'E
	33° 49.717'S	25° 43.652'E
	33° 50.472'S	25° 44.148'E
	33° 50.468'S;	25° 42.497'E

the location indicated in the locality plan, attached as Annexure 2 of this authorisation.

- for the establishment of a Sea-Based Aquaculture Development Zone (ADZ) in Algoa Bay in the Nelson Mandela Metropolitan Municipality, Eastern Cape Province, hereafter referred to as "the property".

The recommended post-mitigation scenario for the project will include the following sites:

**(a) ADZ Precincts**

The precincts considered in this application include Algoa 1 Option 1, 6 and 7, and each of these sites has been described in more detail below.

- **Algoa 1 Option 1 (Summerstrand Site) – Bivalve culture (Oyster and Mussels)**

Algoa 1 Option 1 measures approximately 284.4ha and lies approximately 2km offshore from the popular beaches of the southern suburbs of Port Elizabeth (King's Beach, Humewood Beach, Hobie Beach, and Pollock Beach).

- **Algoa 6 (Port Elizabeth Harbour Site) – Bivalve culture (Oyster and Mussels)**

The site measures approximately 479ha and is located in water ranging in depth from 5-12m. This site is situated adjacent to the Port Elizabeth harbour wall and extends parallel to the shoreline for approximately 4.8km.

- **Algoa 7 (Ngqura Harbour site) – Finfish Culture**

Algoa 7 has been identified as a potential site for finfish culture. This site measures 355ha in size and is positioned approximately 3km offshore from the Ngqura harbour and adjacent to the recently promulgated Addo Marine Protected Area (MPA)

Precinct	Size (ha)
Algoa 1 Option 1 – Summerstrand	284.4 ha
Algoa 6 - Port Elizabeth Harbour	479 ha
Algoa 7 – Ngqura Harbour	355 ha
Total ADZ size	1 118.4 ha

(b) **Species and methods for aquaculture production**

The following species are considered for farming in the ADZ:

- Currently cultivated bivalve species:
  - Pacific oyster (*Crassostrea gigas*) (alien)
- New bivalve species:
  - Cape Rock Oyster *Striostrea margaritacea* (indigenous)
  - Black mussel *Choromytilus meridionalis* (indigenous)
  - Brown mussel *Perna perna* (indigenous)
  - Mediterranean mussel *Mytilus galloprovincialis* (alien)
- New finfish species (only indigenous species are considered):
  - Yellowtail (*Seriola lalandi*)
  - Dusky kob (*Argyrosomus japonicas*)
  - Silver kob (*Argyrosomus inodorus*)

- Yellowfin tuna (*Thunnus albacares*)
- Sole
- Geelbek (*Atractoscion aequidens*)
- Spotted grunter (*Pomadasys commersonnii*)
- White steenbras (*Lithognathus lithognathus*)
- White stumpnose (*Rhabdosargus globiceps*)
- Red roman (*Chrysoblephus laticeps*)

Viable production methods for farming in the ADZ:

- Longlines for bivalve culture, comprising a surface rope with floats and moored at each end to fix the line in position. The production ropes for mussels or oyster racks are then suspended from the surface rope;
- Cages for finfish production, constructed of circular flexible high-density polyethylene with multimoorings systems.

**(c) Finfish Production Volumes**

Precinct	Species	Total annual production per ADZ precinct
Algoa 7	<i>Seriola lalandi</i>	3 555

A precautionary phased approach is proposed for finfish farming in the ADZ, where activities in the first year of operation would be limited to pilot operations producing 1000 tonnes finfish per annum for the entire ADZ. Bio-physical and socio-economic monitoring studies will be conducted during the first phase of the establishment of the ADZ and would determine the acceptable maximum scale of the ADZ based on observed environmental impacts. The phased approach would be overseen by the ADZ Management Committee (AMC) and the Consultative Forum.

**(d) Sea-based Aquaculture Activities**

Sea-based activities associated with aquaculture in the ADZ include:

- Servicing and maintenance of aquaculture structures (such as rafts, lines, cages);
- Seeding/acclimating and harvesting of cultivated species;
- Harvesting of cultivated species;

- Initial processing of bivalves, including de-clumping and grading, typically on the raft or support vessel; and
- Vessel trips between the shore and aquaculture areas, e.g. to service structures or harvest species.

**(e) Associated Sea-based Infrastructure**

Besides the rafts, lines, cages and barrels (including moorings and flotation devices) required for aquaculture, the following associated sea-based infrastructure is required:

- Navigational lights demarcating aquaculture areas; and
- Mooring facilities for boats.

Note that this environmental authorisation does not include the following:

- 1) Authorisation of the land based facilities, since the detailed information for land based facilities will depend on the specific cultivated species and production methods chosen by the individual operators within the ADZ. Should the land based activities of the individual operators leasing areas within the ADZ trigger any listed activities in terms of the NEMA EIA Regulations, authorisation for those land based activities will need to be obtained from the relevant Competent Authority prior to commencement of the activity by the individual operators; and
- 2) Authorisation of currently allocated and farmed areas within the ADZ, since these areas are already existing.
- 3) Algoa 1 – Option1- : Summerstrand, with a total areas of 27.6 ha located as per the below geographic coordinates:

Points	Latitude	Longitude
Excised Area as per recommendations in the marine ecology and socio-economic studies:	33° 58.811'S	25° 42.025'E
	33° 58.685'S	25° 42.407'E
	33° 58.468'S	25° 42.302'E
	33° 58.593'S	25° 41.921'E

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## Conditions of this Environmental Authorisation

### Scope of authorisation

1. The post mitigation scenario presented as Option B (bivalve farming at Algoa 1 Option 1, bivalve farming at Algoa 6 and finfish farming at Algoa 7) as the preferred Alternative Option for the establishment of the Sea-Based Aquaculture Development Zone (ADZ) in Algoa Bay, within the Nelson Mandela Metropolitan Municipality in the Eastern Cape Province is approved as per the geographic coordinates cited above (excluding currently allocated and farmed areas, and areas where authorisations have been issued to other aquaculture operators for the same areas, as per the above).
2. Authorisation of the activity is subject to the conditions contained in this environmental authorisation, which form part of the environmental authorisation and are binding on the holder of the authorisation.
3. The holder of the authorisation is responsible for ensuring compliance with the conditions contained in this environmental authorisation. This includes any person acting on the holder's behalf, including but not limited to, an agent, servant, contractor, sub-contractor, employee, consultant or person rendering a service to the holder of the authorisation.
4. The activities authorised may only be carried out at the property as described above.
5. Any changes to, or deviations from, the project description set out in this environmental authorisation must be approved, in writing, by the Department before such changes or deviations may be effected. In assessing whether to grant such approval or not, the Department may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and it may be necessary for the holder of the authorisation to apply for further environmental authorisation in terms of the regulations.
6. The holder of an environmental authorisation must apply for an amendment of the environmental authorisation with the competent authority for any alienation, transfer or change of ownership rights on the property on which the activity is to take place.
7. This activity must commence within a period of five (05) years from the date of issue of this environmental authorisation. If commencement of the activity does not occur within that period, the authorisation lapses and a new application for environmental authorisation must be made in order for the activity to be undertaken.

8. Commencement with one activity listed in terms of this environmental authorisation constitutes commencement of all authorised activities.
9. Construction must be completed within five (05) years of the commencement of the activity on site.

#### **Notification of authorisation and right to appeal**

10. The holder of the authorisation must notify every registered interested and affected party, in writing and within 14 (fourteen) calendar days of the date of this environmental authorisation, of the decision to authorise the activity.
11. The notification referred to must –
  - 11.1. specify the date on which the authorisation was issued;
  - 11.2. inform the interested and affected party of the appeal procedure provided for in the National Appeal Regulations, 2014;
  - 11.3. advise the interested and affected party that a copy of the authorisation will be furnished on request; and
  - 11.4. give the reasons of the competent authority for the decision.

#### **Commencement of the activity**

12. The authorised activity shall not commence until the period for the submission of appeals has lapsed as per the National Appeal Regulations, 2014 and no appeal has been lodged against the decision. In terms of section 43(7), an appeal under section 43 of the National Environmental Management Act, 1998 will suspend the environmental authorisation or any provision or condition attached thereto. In the instance where an appeal is lodged you may not commence with the activity until such time that the appeal has been finalised.

#### **Management of the activity**

13. The Environmental Management Programme (EMPr) submitted as part of the Application for EA is hereby approved. This EMPr must be implemented and strictly adhered to. Individual operators must compile individual site specific EMPrs for the individual farms that are to be leased in the ADZ. The individual EMPrs must be in line with the recommendations of this overarching approved EMPr and the conditions of this EA. The individual EMPrs must be submitted to the ADZ Monitoring

Committee (AMC) (see Condition 14 below) for endorsement and to the Department for record keeping purposes, before commencement of operations by the individual operator.

### **ADZ Management**

14. To ensure appropriate ADZ management, two management bodies must be established by the holder of the authorisation prior to commencement of the activity.
- 14.1. An ADZ Management Committee (AMC), comprising of, but not limited to, the following:
- Department of Forestry, Fisheries and the Environment (DFFE):
    - Aquaculture and Economic Development;
    - Oceans and Coasts;
    - Biodiversity Management;
    - Compliance Monitoring;
  - Eastern Cape Provincial Department of Economic Development, Environmental Affairs and Tourism (DEDEAT);
  - The Nelson Mandela Bay Municipality;
  - Transnet National Port Authority:
    - Port of Ngqura;
    - Port of Port Elizabeth;
  - South African Civil Aviation: Environment Department; and
  - Department of Sport and Recreation (national, provincial and local).
- 14.2. A Consultative Forum that includes other relevant government departments and relevant local/public interest organisations, to review environmental monitoring data, advise on management and recommend measures to the AMC. The Consultative Forum will therefore feed into the AMC through outputs that it provides to the AMC for consideration.
15. Upon establishment of the Consultative Forum, a notice must be published in a local newspaper announcing the creation of the Consultative Forum, providing contact details for the Consultative Forum Secretariat and inviting interested stakeholders to register on a stakeholder database to receive relevant notifications about the ADZ.

### **ADZ Management Committee**

16. The function of the AMC is to oversee, facilitate, manage and monitor aquaculture operations in the ADZ. The Department of Forestry, Fisheries and the Environment: Aquaculture and Economic Development (DFFE: AED), as the applicant, is primarily responsible for day-to-day management of the ADZ and ensuring the implementation of and adherence to the overarching approved EMPr, with appropriate support and guidance provided by the other AMC members:
17. The AMC must meet before the commencement of construction activities to appoint a Chairperson, an Environmental Control Officer (ECO), and to discuss the Terms of Reference (the member constitution, purpose, outcomes, roles and functions of the AMC, including but not limited those specified in this authorisation). From then on, the AMC must sit once every two months and special meetings can be convened on special or emergency situations.
18. The AMC must be consulted before the appointment of the project ECO, to ensure that they are suitably qualified and have the relevant expertise to monitor and ensure compliance with the conditions of the EA and EMPr.
19. The Chairperson must be an independent person, with experience in the environmental management and marine aquaculture field and/ or industry.
20. Key functions of the AMC are to:
  - 20.1. Monitor aquaculture operators' compliance with the EMPr and ADZ EA conditions;
  - 20.2. Oversee environmental monitoring related to aquaculture in Algoa Bay;
  - 20.3. Monitor production volumes in the ADZ;
  - 20.4. Make decisions based on the outcomes of environmental monitoring, which could lead to the amendment of operations within the authorised ADZ;
  - 20.5. Settle disputes regarding the interpretation of requirements in the EMPr and EA;
  - 20.6. Receive and manage stakeholder comments;
  - 20.7. Record and, if necessary, coordinate a response to environmental incidents related to aquaculture operations;
  - 20.8. Review and comment on new / expanded aquaculture farm proposals within the approved ADZ; and
  - 20.9. Provide updated information to the public (e.g. farm coordinates, water quality information, and notification of new aquaculture operations).
21. The AMC organisational structure must make provision for various functions, including:
  - 21.1. Chairperson: Calls and chairs meetings of the AMC;

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- 21.2. Secretariat: Fulfills secretariat functions, including:
- 21.2.1. Maintenance of member details and arrangement of meetings;
  - 21.2.2. Compiling and distribution of meeting notes;
  - 21.2.3. Distribution of communication to AMC members and aquaculture farmers in the ADZ;
  - 21.2.4. Maintenance of a database of registered (public) stakeholders;
  - 21.2.5. Drafting and distribution of regular (at least biannual) AMC Reports to all Consultative Forum members and registered stakeholders on activities in the ADZ;
  - 21.2.6. Administration of and responding to stakeholder comments on aquaculture activities in the ADZ; and
  - 21.2.7. Reporting on stakeholder aspects at AMC meetings.
- 21.3. Environmental Representative: Fulfills environmental control functions, including:
- 21.3.1. Liaising with the suitably qualified service provider(s) appointed to attend to environmental sampling, monitoring and auditing aspects in the ADZ to ensure that monitoring is implemented as per the requirements;
  - 21.3.2. Receiving and reviewing monthly Farm Monitoring Reports;
  - 21.3.3. Receiving and reviewing environmental sampling, monitoring and audit results;
  - 21.3.4. Notifying the Chairperson in the event any aspects require immediate attention of the AMC;
  - 21.3.5. Notifying the Secretariat in the event any aspects require immediate attention of other aquaculture farmers in the ADZ; and
  - 21.3.6. Reporting on environmental aspects at AMC meetings.

### **Consultative Forum**

22. The holder of the authorisation must invite representatives of other relevant government departments, authorities, relevant local / public interest organisations and ADZ operators to become members of the Consultative Forum, including the following institutions / organisations:
- 22.1. Government and authorities:
- South African National Parks (SANParks);
  - Eastern Cape Department of Agriculture and Land Affairs;
  - South African Heritage Resource Agency (SAHRA) – Maritime and Underwater Cultural Heritage (MUCH) Unit;

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- Nelson Mandela Bay Metropolitan Municipality; and
- Sarah Baartman District Municipality.

22.2. Aquaculture Industry:

- Local industry association representing operators in the ADZ; and
- Farmers operating in the ADZ.

22.3. Other organisations:

- Eastern Cape Parks and Tourism Agency;
- Representatives from the various user groups (tourism, fisheries, diving, yachting, surfing, lifesaving etc.);
- Representatives of sport events and festivals including, but not limited to:
  - Splash Festival;
  - Jendemark Nelson Mandela Bay Bell Buoy Challenge;
  - City Lodge Hotels' 3 Beaches Challenge;
  - Summer Triathlon Series;
  - City Surf Pro;
  - aQuellé Ocean Racing Series;
  - Lifesaving competitions;
  - International Yachting Volvo Ocean Race;
  - National and international Hobie 16 Championships;
  - Mirror Worlds Championships;
- Scientific representatives from NMU and/or Rhodes Universities;
- South African Environmental Observation Network (SAEON);
- Wildlife and Environmental Society of South Africa (WESSA);
- Southern African Foundation for the Conservation of Coastal Birds (SANCCOB);
- Endangered Wildlife Trust (EWT);
- Ratepayers Associations and members of the public; and
- Airports Company South Africa Port Elizabeth.

23. Forum members will join on a voluntary basis and at no costs to DFFE: AED.

24. Key functions of the Consultative Forum are to:

- 24.1. Review environmental monitoring data related to aquaculture in Algoa Bay;
- 24.2. Make recommendations to the AMC based on the outcomes of environmental monitoring;  
and

- 24.3. Provide a platform for discussion of environmental management in the ADZ and advise the AMC on ADZ Management.

#### **Frequency and process of updating the EMPr**

25. The EMPr must be updated where the findings of the environmental audit reports, contemplated in Condition 32 below, indicate insufficient mitigation of environmental impacts associated with the undertaking of the activity, or insufficient levels of compliance with the environmental authorisation or EMPr.
26. The updated EMPr must contain recommendations to rectify the shortcomings identified in the environmental audit report.
27. The updated EMPr must be submitted to the Department for approval together with the environmental audit report, as per Regulation 34 of GN R. 982. The updated EMPr must have been subjected to a public participation process, which process has been agreed to by the Department, prior to submission of the updated EMPr to the Department for approval.
28. In assessing whether to grant approval of an EMPr which has been updated as a result of an audit, the Department will consider the processes prescribed in Regulation 35 of GN R.982. Prior to approving an amended EMPr, the Department may request such amendments to the EMPr as it deems appropriate to ensure that the EMPr sufficiently provides for avoidance, management and mitigation of environmental impacts associated with the undertaking of the activity.
29. The holder of the authorisation may apply for an amendment of an EMPr, if such amendment is required before an audit is required. In assessing whether to grant such approval or not, the Department will consider the processes and requirements prescribed in Regulation 37 of GN R. 982.

#### **Monitoring**

30. The holder of the authorisation must appoint a suitably qualified and experienced independent Environmental Control Officer (ECO) for the construction and operational phase of the development that will have the responsibility to ensure that the mitigation/rehabilitation measures and recommendations referred to in this authorisation are implemented and to ensure compliance with the provisions of the EMPr.
- 30.1. The ECO must be appointed before commencement of any authorised activities.

- 30.2. Once appointed, the name and contact details of the ECO must be submitted to the *Director: Compliance Monitoring* of the Department.
- 30.3. The ECO must keep record of all activities on site, problems identified, transgressions noted and a schedule of tasks undertaken by the ECO.
- 30.4. All monitoring studies conducted/commissioned by the Department of Agriculture, Forestry and Fisheries within Algoa Bay must be reviewed by an independent specialist to verify findings before the report is submitted to the AMC.
- 30.5. *Individual operators must ensure that daily monitoring is undertaken. Findings of the daily monitoring must be verified and signed off by the ECO on a monthly basis and reflected in the ECO reports, which must be presented by the ECO to the AMC at the bi-monthly meetings.*
- 30.6. The ECO must also submit a detailed and comprehensive monitoring report to the Directorate: Compliance Monitoring on a monthly basis. A summarised version of this report must also be made available to all AMC members on a monthly basis.

#### **Recording and reporting to the Department**

- 31. All documentation e.g. audit/monitoring/compliance reports and notifications, required to be submitted to the Department in terms of this environmental authorisation, must be submitted to the *Director: Compliance Monitoring* of the Department at [Directorcompliance@environment.gov.za](mailto:Directorcompliance@environment.gov.za).
- 32. The holder of the environmental authorisation must, for the period during which the environmental authorisation and EMPr remain valid, ensure that project compliance with the conditions of the environmental authorisation and the EMPr are audited, and that the audit reports are submitted to the *Director: Compliance Monitoring* of the Department at [Directorcompliance@environment.gov.za](mailto:Directorcompliance@environment.gov.za).
- 33. The frequency of auditing and of submission of the environmental audit reports must be as per the frequency indicated in the EMPr, taking into account the processes for such auditing as prescribed in Regulation 34 of GN R. 982.
- 34. The holder of the authorisation must, in addition, submit an environmental audit report to the Department within 30 days of completion of the construction phase (i.e. within 30 days of site handover) and a final environmental audit report within 30 days of completion of rehabilitation activities.
- 35. The environmental audit reports must be compiled in accordance with Appendix 7 of the EIA Regulations, 2014 and must indicate the date of the audit, the name of the auditor and the outcome

of the audit in terms of compliance with the environmental authorisation conditions as well as the requirements of the approved EMPr.

36. Records relating to monitoring and auditing must be kept on site and made available for inspection to any relevant and competent authority in respect of this development.

#### **Notification to authorities**

37. A written notification of commencement must be given to the Department no later than fourteen (14) days prior to the commencement of the activity. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence, as well as a reference number.

#### **Operation of the activity**

38. A written notification of operation must be given to the Department no later than fourteen (14) days prior to the commencement of the activity operational phase.

#### **Site closure and decommissioning**

39. Should the activity ever cease or become redundant, the holder of the authorisation must undertake the required actions as prescribed by legislation at the time and comply with all relevant legal requirements administered by any relevant and competent authority at that time.

#### **Specific conditions**

40. Carrying capacity for Algoa 7 must be verified through environmental monitoring
41. Access to the Basket Star dive site must be maintained to reduce impacts on the diving industry.
42. An integrated waste management approach must be implemented that is based on waste minimisation and must incorporate reduction, recycling, re-use and disposal where appropriate. Any solid waste must be disposed of at a landfill licensed in terms of section 20 (b) of the National Environment Management Waste Act, 2008 (Act No.59 of 2008).
43. Mariculture infrastructure must not be moored over long-lived biogenic habitats (e.g. reefs). The extent of the of the reef must be confirmed prior to commencement of construction activities and no

- mariculture infrastructure must be situated within 200m buffer zone around the geographic coordinates S33° 58. 620'; E25° 42. 223'.
44. Underwater videography; diver operated or by using drop cameras or remotely operated vehicles must be used to determine the extent of the reef.
  45. A finfish biosecurity management plan must be developed to provide mitigation measures to (1) reduce the likelihood of finfish escape occurring; (2) ensure comprehensive training of staff; (3) monitor stock comprehensively for disease and/parasites as part of a formalised stock health monitoring programme and take necessary action to eliminate pathogens through the use of therapeutic chemicals or improved farm management (lowest effective dose); (4) locate cages stocked with different cohorts of the same species as far apart as possible (no less than 100m).
  46. Genetic compatibility between wild and cultured finfish stock must be facilitated by the implementation of the "Genetic Best Practice Management Guidelines for Marine Finfish Hatcheries" developed by DFFE: AED and ensure adequate genetic monitoring.
  47. Appropriate predator nets and visual deterrents must be installed and maintained for finfish culture. A protocol for dealing with problem piscivores in conjunction with experts and officials should be developed.
  48. The cleaning of biofouled infrastructure (ropes etc.) for oysters must be conducted in such a way as to minimise deposition to the seafloor beneath the farms (*i.e.* biofouling must be collected as deposited of at a suitable onshore disposal facility). Routine surveillance on and around marine farm structures, associated vessels and infrastructure must be undertaken for indications of non-native fouling species. If spat import cannot be avoided, culture facilities should only be permitted to use spat sourced from biosecure certified hatcheries and/or quarantine facilities.
  49. Diver surveys must be completed during the activities required for setting anchor arrays. Commercial divers working on the project must be provided with brief orientation training. If wreck material is identified, archaeologists must be contracted to make an assessment.
  50. Benthic Mapping / survey of the area under individual farms must be undertaken by prospective operators before the commencement of the operational phase in order to establish baseline conditions for monitoring purposes.
  51. Monitoring points must be established before the commencement of farming activities on each site in order to measure pre-farming baseline conditions with observed conditions during the operational phase. The number and placement of these monitoring points, and the parameters measured, must be appropriate to the mariculture activity type (and its by-products) at that site, the benthic habitat at that site, as well as the prevailing environmental conditions (such as the dominant current

directions). The information gathered from monitoring points must be used to guide the phased development of each site.

52. Predictive dispersion models must be developed within 2 years of new aquaculture activities commencing and these must be used together with monitoring and other information to inform the continuous management of the Algoa Bay Aquaculture Development Zone.
53. Any geophysical data generated to support the development of aquaculture in this area must be archaeologically reviewed for the presence of historical shipwrecks or related material and to ground truth proposed mooring locations. Datasets that are particularly useful in this regard are magnetometer, side scan sonar and multibeam bathymetric data. An archaeologist must be consulted before data are collected to ensure that the survey specifications and data outputs are suitable for archaeological review.
54. Any video footage collected support to development of aquaculture in the three areas should ideally also be reviewed by the archaeologist for evidence of shipwreck material on the seabed.
55. If geophysical data are not collected, the proposed positions of all moorings must be ground truthed by suitably qualified divers.
56. Should the reviews and ground truthing set out above identify wreck material at or near the location of any proposed mooring, micro-siting of the mooring and the possible implementation of an exclusion zone around the archaeological feature should be sufficient to mitigate the risks to the site.
57. Should any archaeological material, be accidentally encountered during the course of developing aquaculture operations in any of the proposed areas, work must cease in that area until the project archaeologist and SAHRA have been notified, the find has been assessed by the archaeologist, and agreement has been reached on how to deal with it.
58. A detailed anchor distribution plan must be provided to the Maritime and Underwater Cultural Heritage Unit at SAHRA once this has been finalised. This plan can be used to reassess potential shipwreck impacts to assist developers in determining whether to amend placement plans to avoid incurring further heritage intervention costs.

#### **ADZ phasing-in of aquaculture expansion**

59. Due to the impact level observed even after mitigation and the inclusion of Algoa 7 (MPA site) in options A, B and C, it is recommended that no more than three finfish operators should be approved for an initial pilot phase, with a total annual production for the ADZ not exceeding 1 000 tonnes in the first year.

60. Should monitoring reveal acceptable impacts as defined by the environmental quality objectives, indicators and performance measures, operators should be permitted to increase production from pilot phase to full commercial scale (not exceeding the carrying capacity at each site for *Seriola lalandi* and *Argyrosomus* sp. as recommended in over at least a three year period, provided that resource quality objectives are maintained.

Precinct	Species	Total annual production per ADZ precinct
Algoa 7	<i>Seriola lalandi</i>	3 555

61. The holder of the authorisation must ensure that the findings of the dispersion modelling inform the site specific EMPs (to be compiled individual operators), Sampling Plan, ADZ layout and expansion.
62. Environmental monitoring must be implemented to inform management and expansion of operations as part of the phased approach

#### General

63. A copy of this environmental authorisation, the audit and compliance monitoring reports, and the approved EMP, must be made available for inspection and copying-
- 63.1. at the site of the authorised activity;
  - 63.2. to anyone on request; and
  - 63.3. where the holder of the environmental authorisation has a website, on such publicly accessible website.
64. National government, provincial government, local authorities or committees appointed in terms of the conditions of this authorisation or any other public authority shall not be held responsible for any damages or losses suffered by the holder of the authorisation or his/her successor in title in any instance where construction or operation subsequent to construction be temporarily or permanently stopped for reasons of non-compliance by the holder of the authorisation with the conditions of authorisation as set out in this document or any other subsequent document emanating from these conditions of authorisation.



**Date of First Issue of the Environmental Authorisation: 26 February 2020**

**Date of Second Issue: 27/01/2021**



**Mr Sabelo Malaza**

**Chief Director: Integrated Environmental Authorisations  
Department of Forestry, Fisheries and the Environment**

## **Annexure 1: Reasons for Decision**

### **1. Information considered in making the decision**

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) The information contained in the final BAR dated October 2019;
- b) The comments received from DFFE: Branch: Oceans and Coasts; Eastern Cape Department of Economic Development, Environmental Affairs and Tourism; the Nelson Mandela Bay Metropolitan Municipality; SANParks; WESSA; SAHRA; and Interested and Affected Parties as included in the final BAR dated October 2019;
- c) Mitigation measures as proposed in the BAR dated October 2019 and the EMPr;
- d) The information contained in the specialist studies contained in the BAR; and
- e) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998).

### **2. Key factors considered in making the decision**

All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.

- a) The existing areas are not authorised as part of this environmental authorisation, however the approved ADZ EMPr must inform and be used to manage any future expansion of allocated existing areas.
- b) The findings of all the specialist studies conducted and their recommended mitigation measures.
- c) In terms of need and desirability, the proposed project could indirectly improve food security by providing job opportunities and contributing to the local and regional economy. Furthermore, the proposed project could contribute to import substitution and therefore create local opportunities instead of purchasing products where socio economic impacts are realised elsewhere, (although this benefit is incumbent on ensuring that existing and planned projects and plans related to the tourism industry are not impacted negatively). Emerging trends, which are also applicable to

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South Africa have shown that aquaculture (including marine finfish culture) could positively contribute to addressing the following:

- Increasing demand for fish products in the coming decades as a result of continued growth in the world population;
  - Major increases in fish food production are forecasted to come from aquaculture;
  - Lack of fresh water and space; and
  - Marine aquaculture holds potential for sustained growth due to declining fishing catches.
- d) The project forms part of a presidential initiative to unlock the potential of the oceans to create employment and income in coastal communities, and specifically aims to create incentives for development of the aquaculture industry in Algoa Bay, which has historically already provided skills development and employment in the area. As such, the project forms part of a government initiative and aims to further the objectives of the National Development Plan in terms of economic development.
- e) Due to the impact level observed even after mitigation and the inclusion of Algoa 7 (MPA site) in options A, B and C, through a precautionary approach, it is recommended that no more than three finfish operators should be approved for an initial pilot phase, with a total annual production for the ADZ not exceeding 1 000 tonnes in the first year. Should monitoring reveal acceptable impacts as defined by the environmental quality objectives, indicators and performance measures, operators should be permitted to increase production from pilot phase to full commercial scale (not exceeding the carrying capacity at each site for *Seriola lalandi* and *Argyrosomus* sp. as recommended in over at least a three year period, provided that resource quality objectives are maintained.
- f) The establishment of an ADZ Management Committee (AMC) and Consultative Forum will also help to ensure compliance with the approved EMP and appropriate ADZ management.
- g) The final BAR dated October 2017 identified all relevant environmental legislation and guidelines that have been considered in the preparation of the final BAR dated October 2019.
- h) The methodology used in assessing the potential impacts identified in the final BAR dated October 2019 and the specialist studies has been adequately indicated.
- i) A sufficient public participation process was undertaken and the applicant has satisfied the minimum requirements as prescribed in the EIA Regulations, 2014, as amended, for public involvement.

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### 3. Findings

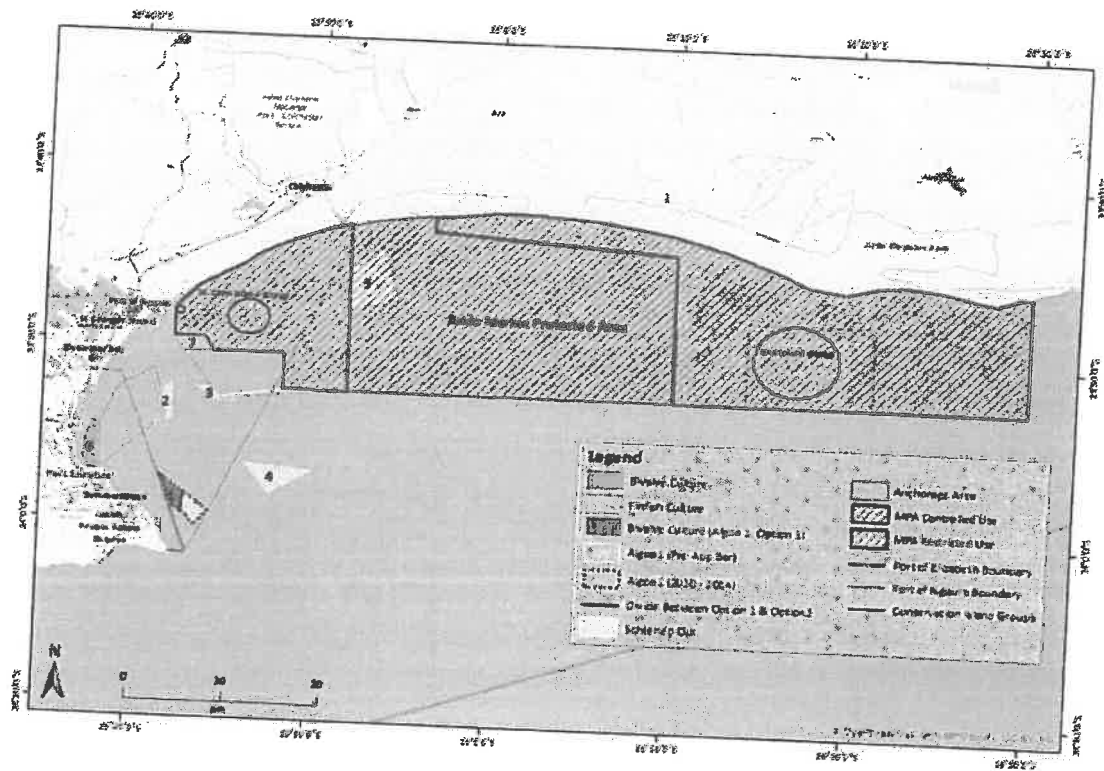
After consideration of the information and factors listed above, the Department made the following findings -

- a) The identification and assessment of impacts are detailed in the final BAR dated October 2019 and sufficient assessment of the key identified issues and impacts have been completed.
- b) The procedure followed for impact assessment is adequate for the decision-making process.
- c) The proposed mitigation of impacts identified and assessed adequately curtails the identified impacts.
- d) According to the independent Environmental Assessment Practitioner, the information contained in the final BAR dated October 2019 is accurate and credible.
- e) EMP measures for the pre-construction, construction and rehabilitation phases of the development were proposed and included in the final BAR and will be implemented to manage the identified environmental impacts during the construction phase.

In view of the above, the Department is satisfied that, subject to compliance with the conditions contained in the environmental authorisation, the authorised activities will not conflict with the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act, 1998 and that any potentially detrimental environmental impacts resulting from the authorised activities can be mitigated to acceptable levels. The environmental authorisation is accordingly granted.

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## Annexure 2: Locality Plan



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**ANNEXURE B1**

Costing Activity	Unit of measure	Cost per unit	Total Costs
1. Project inception meeting and report	1 meeting and report		
2. Baseline survey	1 survey and report		
3. Servicing of bottom moored instruments	26 service intervals		
4. Quarterly progress meeting and minutes	12 meetings and minutes		
5. Quarterly Environmental Sampling reports	12 reports		
6. Benthic Macrofauna survey and report	1 survey and report		
7. Ecological Monitoring survey and report	3 surveys and reports		
8. Annual Synoptic Survey	12 survey seasonal and report		
9. Epifauna reef community surveys	1 survey and report		
10. Validation of finfish model	1 report		
11. Digital invertebrate taxonomic reference library	1 report		
12. Biofouling Management Strategy and amendment of the Farm Monitoring Report template	1 report		
13. Project management and progress report	12 reports		
14. ETP species data collection	18 surveys and summary data included on the quarterly report		
15. Impact Assessment	12 sampling trips and report		
<b>TOTAL AMOUNT FOR THE PROJECT including VAT</b>			