

# SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE ENVIRONMENTAL CONTROL OFFICER SUMMARY REPORT 27



**June 2024** 



Cover photo: Amy Wright

## SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE ENVIRONMENTAL CONTROL OFFICER SUMMARY REPORT 27

#### **June 2024**

Report prepared for:

#### Department of Forestry, Fisheries and the Environment

Branch: Fisheries Management



by:

#### Anchor Research & Monitoring (Pty) Ltd

8 Steenberg House, Silverwood Close, Tokai, South Africa www.anchorenvironmental.co.za



Citation: Anchor Research & Monitoring (Pty) Ltd. 2024. Saldanha Bay Aquaculture Development Zone Environmental Control Officer ADZ Summary Report 27. Specialist Report no. 2014/27\_Ic prepared by Anchor Research & Monitoring (Pty) Ltd for the Department of Forestry, Fisheries and the Environment Branch: Fisheries Management. 29pp.

#### © Anchor Research & Monitoring 2024

Use of material contained in this document by prior written permission of the Anchor Environmental Group only.

## **TABLE OF CONTENTS**

T.	ABLE (	OF CONTENTS	I
LI	IST OF	ABBREVIATIONS	II
P	ROJEC	T TEAM	
	-	S OF THE ENVIRONMENTAL CONTROL OFFICER	
		s of the Independence in terms of Chapter 5 of the National Environmental Management A	
	COMPL	iance with Regulation 34 of the EIA Regulations, 2014	IV
I	INT	RODUCTION	I
	1.1 1.2	Scope and purpose	
2	THI	E SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE	2
	2.1	Introduction and background	2
	2.2	SITE AND PROJECT DESCRIPTION	
	2.3	OPERATORS IN THE ADZ	7
3	ECC	O AUDITS	8
	3.1	APPROACH AND METHODOLOGY	8
	3.2	PROGRESS WITH PARTIAL OR NON-COMPLIANCES	8
	3.3	ACTIVITIES IN THE ADZ — JUNE 2024	9
	3.3.1	Farm inspections	9
	3.3.2	Pepper Bay Jetty	9
	3.4	SUMMARY OF COMPLIANCE WITH THE EA AND EMPR	10
	3.5	FARM MAINTENANCE PLAN FEEDBACK	11
	3.5.1	Blue Ocean Mussels	11
	3.5.2	P. Requa Enterprises	11
	3.5.3	Pluto Mussel Trading	11
	3.5.4	•	
	3.5.5	1	
	3.6	FARM MONITORING REPORTS (FMRs)	
	3.7	BEACH MONITORING BY OPERATORS	
	3.8	BEACH INSPECTION BY ECO	
	3.9	Incidents	16
4	ADZ	Z MANAGEMENT	17
	4.1	BAY USER SAFETY	17
	4.2	BIVALVE PRODUCTION VOLUMES	
	4.3	ENVIRONMENTAL MONITORING	17
5	REC	COMMENDATIONS	18
	5.1	GENERAL RECOMMENDATIONS	18
	5.2	EVALUATION OF EMPR	19
6	CO	NSULTATIONS AND COMMUNICATIONS	20
	6.1	Consultations	20
	6.2	COMMUNICATIONS	20

#### LIST OF ABBREVIATIONS

ADZ Aquaculture Development Zone
AMC Aquaculture Management Committee
Anchor Anchor Research & Monitoring (Pty) Ltd

BB Big Bay

BOM Blue Ocean Mussels

BSASA Bivalve Association of South Africa

BSP Blue Sapphire Pearls

C Compliant

CF Consultative Forum

DFFE Department of Forestry Fisheries and the Environment

EA Environmental Authorization
ECO Environmental Control Officer
EIA Environmental Impact Assessment

EMP Environmental Management Plan (for individual farms)

EMPr Environmental Management Programme

ETP Endangered, Threatened and Protected Species

FMR Farm Monitoring Report
MLRF Marine Living Resources Fund

MSC Marine Stewardship Council

NC Non-compliant
OBN Outer Bay North
OBS Outer Bay South
PC Partial Compliance
PLU Pluto Mussels

Requa Enterprises

SAMSA South African Maritime Safety Authority

SB Small Bay

SBM Saldanha Bay Municipality

TNPA Transnet National Ports Authority

### **PROJECT TEAM**

#### **DETAILS OF THE ENVIRONMENTAL CONTROL OFFICER**

Name of the auditor	Amy Wright
SACNASP Reg No.	131256 (Professional Natural Scientist)
Contact Person (if not author):	8 Steenberg House, Silverwood Close, Tokai, Cape Town, South Africa, 7945
Postal address:	(021) 701 3420
E-mail:	amy@anchorenvironmental.co.za
Qualifications:	M.Sc. Biological Sciences

## DETAILS OF THE INDEPENDENCE IN TERMS OF CHAPTER 5 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT OF 1998

#### Box I: Declaration of Independence of Environmental Control Officer

I, Amy Grace Wright hereby declare that I have no conflicts of interest related to the work of this report. Specifically, I declare that I have no personal financial interests in the property and/or development being assessed in this report, and that I have no personal or financial connections to the relevant property owners, developers, planners, financiers, or consultants of the development.

27 June 2024

#### COMPLIANCE WITH REGULATION 34 OF THE EIA REGULATIONS, 2014

The National Environmental Management Act (NEMA, Act 107 of 1998) provides for co-operative environmental governance of South Africa. As promulgated under NEMA (sections 24(5) and 44), the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) are the key regulatory instrument to manage and mitigate environmental impacts caused by any activities or new developments with the potential to affect the environment. Anchor Research and Monitoring carries out audits in terms of Regulation 34 of the EIA Regulations (as amended) and the following should be noted:

- Anchor Research and Monitoring (Anchor) follows the prescribed format for audit reports listed under Regulation 34 of the amended EIA Regulations (Table 1.1).
- Anchor will report on compliance achieved and adequacy of the Environmental Management Programme (EMPr).
- Anchor does not assume the responsibility of ensuring compliance to all other prescriptions listed under Regulation 34 of the EIA Regulations (such as seeking amendment to the EMPr or associated licences/permits). Ensuring compliance is the obligation of the proponent.

Table 1.1.. Legal requirements for Audit Reports per Appendix 7 as prescribed by the EIA Regulations, 2014.

Content of an Environmental Audit report	Section of this report			
Details and expertise of independent ECO and author of this audit report.	Project team			
Declaration that the independent auditor is independent.	Project team			
Scope and the purpose of environmental audit report.	Section 1.1			
Methodology adopted in preparing the environmental audit report.	Section 3.1			
Evaluation of the ability of the EMPr, and in the case of a closure activity, the closure plan to sufficiently:  1. Provide for continued avoidance, management, and mitigation of environmental impacts and at closure.	Section 5.2			
<ol><li>Ensure compliance with EA, EMPr and, in the case of a closure activity, the closure plan.</li></ol>				
Description of any assumptions, uncertainties, or gaps in knowledge.	Section 1.2			
Description of any consultation process undertaken for this audit report.	Section 6			
A summary and copies of comments received during any consultation process.  Section 6.1  Communications register				
Any other information requested by the competent authority.	Section 6.1			

#### I INTRODUCTION

#### I.I SCOPE AND PURPOSE

This Environmental Control Officer (ECO) summary report provides feedback on Saldanha Bay Aquaculture Development Zone (ADZ) compliance with the Environmental Authorisation (EA) and approved Environmental Management Programme (EMPr). This summary report is distributed to Operators, members of the Consultative Forum (CF), members of the ADZ Management Committee (AMC) and the Department of Forestry, Fisheries, and the Environment (DFFE): Compliance Monitoring Directorate. The two primary purposes of this report include:

- Ensuring stakeholders are updated on ADZ activities; and,
- Highlighting areas for improvement in ADZ activities to allow for adaptive management.

This document is intended to highlight significant issues and summarised monthly audits of the ADZ and individual farms (this report is for the June 2024 audit period). The summaries are drawn from the monthly ECO compliance and site inspection reports which are issued to the AMC and individual farms. The monthly ECO compliance and site inspection reports are retained by the DFFE, ECO and AMC for reference as they contain proprietary information.

#### 1.2 Assumptions and limitations of the audit

The audit findings are based on information relayed in documentation to the ADZ ECO by Operators, email correspondence, in-person interviews, as well as observations made during physical site inspections, at a specific point in time. Although the site inspection can reveal evidence of activities carried out during the month for which the audit covers, it cannot fully show the auditor what activities have been carried out on site. The auditor, therefore, must rely on observations made on the day of the audit as well as the information provided by the Operators, proponent, and other relevant stakeholders in order to make conclusions regarding compliance during the preceding month.

It should be noted that the role of the ADZ ECO is to independently monitor compliance, to implement the Audit Standard, as well as to provide input and guidance to the DFFE Project Management Team on a strategic level. Due to the independent nature of the ADZ ECO role, the ECO appointment is not to enforce compliance but to monitor. Compliance with the provisions contained in the EMPr, EA, Permit or any condition imposed by the environmental approvals shall become the responsibility of DFFE. The following Branches and Directorates of DFFE that are considered responsible for compliance for this project include DFFE: Chief Directorate Aquaculture and Economic Development (now Chief Directorate: Aquaculture Development and Freshwater Fisheries), DFFE: Chief Directorate Sector Compliance, and Chief Directorate Sector Enforcement under Branch: Regulatory Compliance and Sector Monitoring.

## 2 THE SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE

#### 2. I Introduction and background

Mussel farming has occurred in Saldanha Bay since 1981 and was subsequently followed by oyster farming in the early 2000s. As the development and expansion of sea-based aquaculture activities comprise a number of Listing Notices in terms of the National Environmental Management Act (NEMA) (No. 107 of 1998, as amended), these activities require that an Environmental Impact Assessment (EIA) process be undertaken to obtain Environmental Authorisation (EA) from the Department of Forestry, Fisheries and the Environment (DFFE). This process can be arduous and costly, which presents a barrier to entry. Therefore, to facilitate investment and development of additional aquaculture in the Bay, the then Department of Agriculture, Forestry and Fisheries (DAFF) undertook the establishment of a sea-based Aquaculture Development Zone (ADZ) in Saldanha Bay.

The Branch Fisheries Management (now DFFE: Fisheries Management) conducted and EIA and obtained an EA for the ADZ in Saldanha Bay on 8 January 2018, which (after appeals) was upheld on 7 June 2018. The DFFE: Fisheries Management must appoint an independent Environmental Control Officer (ECO) during the construction and operational phases of the ADZ, in terms of condition 29 of the EA and condition I of Table 4-2 of the EMPr (see Table 2.1 for ADZ ECO appointments to date). The role of the ADZ ECO is to monitor compliance with stipulations in the EA and EMPr for the construction and operational phases of the ADZ.

Table 2.1. ADZ ECO appointments to date.

Company name	ECO	Period
Ecosense CC	Errol Cerff	September 2018 to August 2019
SRK Consulting (South Africa) (Pty) Ltd.	Kelly Armstrong	September 2019 to February 2020
Errol Cerff	Errol Cerff	March 2020 to September 2020
Errol Cerff	Errol Cerff	October 2020 to September 2021
Errol Cerff	Errol Cerff	October 2021 to March 2022
	Jen Keightley	April 2022 to May 2023
Anchor Research & Monitoring (ARM)	Julia Ndou Amy Wright	June 2023 to May 2024 June 2024 to March 2025

The EA and EMPr have undergone several amendments since the inception of the ADZ, which have been incorporated into the ECO audit scope. The audit scope includes the original EA and its amendments and the most recent amendment of the EMPr. The original EA was issued on 8 January 2018 and amendments to the EA were issued on 10 July 2019 and 14 September 2020 (DEA ref. 14/12/16/3/3/1/1728, 14/12/16/3/3/1/1728/AM1 and 14/12/16/3/3/1/1728/AM2, respectively). The latest EA amended (14/12/16/3/3/1/1728/AM3) was issued on the 02 May 2024 and is still under the appeal period. The original approved EMPr is dated August 2017 and has been amended three times in May 2020, June 2021, and June 2022. While the next amendment of the EMPr was scheduled for June 2023,

No changes to the EMPr were recommended by the ECO or the annual external auditors in June 2023 or June 2024, and the EMPr will remain unchanged for 2024. The next review of the ADZ EMPr is scheduled for June 2025.

The Marine Living Resources Fund (MLRF) under the auspices of DFFE: Branch Fisheries Management has appointed Anchor Research & Monitoring (Pty) Ltd (Anchor) as ECO for the Saldanha Bay ADZ for a period of three (3) years. This document is intended to highlight significant issues only and summarised monthly audits of the ADZ and individual farms.

#### 2.2 SITE AND PROJECT DESCRIPTION

Saldanha Bay is located on the West Coast, approximately 120 km north of Cape Town and supports many economic activities. The Port of Saldanha is South Africa's premier iron ore export port and supports a number of industrial operations in the area. An aquaculture industry predominantly reliant on bivalves was established in Saldanha Bay prior to the establishment of the ADZ. Saldanha Bay is considered an historically important area for fishing activity and multiple fish processing plants are located therein. It is also a tourist destination and caters to various water-based tourism.

When the ADZ was originally proposed the Basic Assessment identified issues of concern including changes to the water quality, visual landscape, and productivity of the Saldanha Bay and Langebaan Lagoon environments. Measures to mitigate such impacts were detailed in the Environmental Management Programme (EMPr) and were made mandatory in the Environmental Authorisation (EA). A phased approach to production was adopted to monitor the impacts of expanding aquaculture before production levels were increased. The phased approach also allowed time to determine whether the mitigation measures had the desired effect of limiting impacts and only if mitigation measures proved effective could production be increased.

The Saldanha Bay ADZ comprises 4 precincts, namely Small Bay (SB), Big Bay (BB), Outer Bay North (OBN), and Outer Bay South (OBS) (Figure 2.1). The BA Report summarised the scope for expansion in the ADZ and comprised a mix of finfish and bivalve farms (Table 2.2). Details of each existing lease are depicted in Figure 2.2 and Figure 2.3. Note that there are two lease areas in OBN that are unallocated and have been advertised for lease applications by Transnet Ports Authority (TNPA). Sea-based activities associated with aquaculture in the ADZ include:

- Servicing and maintenance of aquaculture structures (such as rafts, lines, cages).
- Harvesting of cultivated species.
- Initial processing of bivalves, including de-clumping and grading, typically on the raft or support vessel.
- Vessel trips between the shore and aquaculture areas.



Figure 2.1. Saldanha Bay ADZ precincts.

Table 2.2. ADZ ECO appointments to date.

Precinct	ADZ Area (ha)	Area suitable for bivalve cultivation (ha)	Area suitable for fish and bivalve cultivation (ha)
Small Bay (SB)	163	163	-
Big Bay (BB)	409	367	42
Outer Bay North (OBN)	216	76	140
Outer Bay South (OBS)	96	-	96
Total	884	606	278



Figure 2.2. (Left) Bivalve culture in Small Bay (SB) and (right) mixed bivalve and finfish culture in Big Bay (BB).

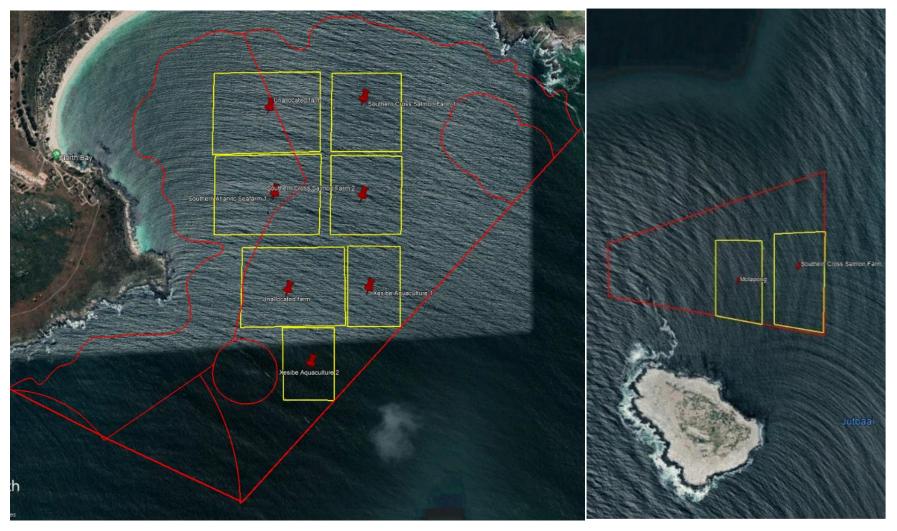


Figure 2.3. (Left) Bivalve culture in Outer Bay North (OBN) and (right) finfish culture in Outer Bay South (OBS).

#### 2.3 OPERATORS IN THE ADZ

An essential aspect to assessing actual impact and possibility of expanding operations relies on accurate production data received from each farm. Farms submit production figures in the form of a monthly Farm Monitoring Report (FMR) to the ADZ ECO and DFFE. As such all farms are required to submit FMRs in terms of the aquaculture permit. Since this is essential to the monitoring of impacts, tracking compliance with this requirement will form part of the ADZ ECO duties even though this is not specified in the EMPr. A list of Operators in the ADZ as of April 2024 (beginning of the 3<sup>rd</sup> annual cycle in the ARM ECO contract) is presented in Table 2.3.

Table 2.3. Operators in the Saldanha Bay ADZ.

Farm name	Species	Precinct	Right No. MAQUA
African Olive Trading 232 (Pty) Ltd	Mussels	SB	1027
Aqua Foods SA (Pty) Ltd	Mussels/ oysters	SB & BB	1029
Blue Lagoon Products (Pty) Ltd	Oysters	ВВ	1057
Blue Ocean Mussels (Pty) Ltd	Mussels/ Oysters	SB	11828 & 0004
Blue Sapphire Pearls CC	Mussels / Oysters	SB	0006
Imbaza Mussels (Pty) Ltd	Oysters	SB	0019
K2019005713 (Pty) Ltd	Mussels	ВВ	1053
K2019005725 (Pty) Ltd	Mussels	ВВ	1052
Lagoon Aqua	Oysters	ВВ	1057
Madima General Agriculture Trading (Pty) Ltd	Mussels	ВВ	1048
Molapong Aquaculture (Pty) Ltd	Salmon	ВВ	1033
Mika Growers (Pty) Ltd	Mussels	ВВ	1047
MMMAgri Consult (Pty) Ltd	Mussels	ВВ	1045
Pluto Mussels and Trading (Pty) Ltd	Mussels	ВВ	1051
Requa Enterprises (Pty) Ltd	Mussels	OBN	1035
Saldanha Bay Oyster Company (Pty) Ltd	Oysters	ВВ	0012 & 0007
Salmar Trading (Pty) Ltd	Oysters	SB	1032
Simunye Mussels (Pty) Ltd	Mussels	ВВ	1047
Southern Atlantic Sea Farms (Pty) Ltd	Mussels	BB / OBN	1028
Southern Cross Salmon Farming (Pty) Ltd	Mussels	OBN	1037
Ulwazi Kukutya (Pty) Ltd	Mussels	ВВ	1050
West Coast Aquaculture (Pty) Ltd	Mussels/ oysters	SB & BB	0003
West Coast Oyster Growers CC	Oysters/ Mussels	SB & BB	0013
Xesibe Aquaculture Project (Pty) Ltd	Mussels	OBN	1046

#### **3 ECO AUDITS**

#### 3.1 APPROACH AND METHODOLOGY

Monthly ECO audits comprise monthly site inspections using the approved checklist and audit standard; rotational compliance audits on individual farms using monthly Farm Monitoring Reports and supporting documentation; and ongoing regular audits of compliance of the ADZ administration as a whole. The monthly ECO audit cycle involves communication with Operators and the AMC as required as well as developing and distributing the following documents:

- Detailed monthly ADZ compliance reports issued to the AMC and Compliance Monitoring Directorate at DFFE.
- ECO site inspection report issued to the AMC.
- Summary report (this report) submitted to the CF, AMC, and Operators.

#### 3.2 Progress with partial or non-compliances

The partial compliances in the Saldanha Bay ADZ project can be resolved with the following mitigation measures stipulated below:

It is the mandate of TNPA to accurately demarcated with South African Maritime Safety Authority (SAMSA) approved marker buoys (EMPr table 5-I, condition 2). The DFFE has no control over this. To identify the required marker buoys for the ADZ, an Aids to Navigation (AtoN) Plan was developed (final draft submitted on 27 November 2022). The workshop for stakeholder engagement on this Risk Assessment was held on the II - I2 October 2023. A Navigational Risk Assessment was conducted for Saldanha Bay, therefore, AtoN plan needs to be implemented in order to be rated compliant. Meetings between TNPA and DFFE were held on the 7 December 2023 and 8 March 2024 to further discussions are required to resolve the outstanding issues with TNPA.

- Operators must remain compliant with maintenance and operational guidelines (EMPr table 5-1, condition 6). Progress has been made with farm maintenance plans and is discussed in detail in Anchor Report 2014/27\_1b (ECO site inspection report). Blue Ocean Mussels (BOM) has completed all maintenance activities as per the farm maintenance plan provided to the ADZ ECO on 20 July 2022.
- Managers of the ADZ should ensure that the shoreline of the Bay is monitored for aquaculture equipment washed ashore (EMPr table 7-1, condition 2). There has been a notable improvement in the reporting of beach clean-up data in 2024, with data provided to the ECO for all three precincts (Big Bay, Small Bay and Outer Bay) each month since January 2024 (discussed in detail in Anchor Report 2014/27\_1b). The ECO received beach clean-up data for May 2024 for clean ups in Outer Bay North (North Bay), and Small Bay (the whole Northern Beach). Due to poor weather, the boat and crew couldn't access Spreeuwalle beach in Big Bay, but Donkergat (to the south of Spreeuwalle in Big Bay) were cleaned instead. No floats were retrieved from the Small Bay beach, with a small fraction of the waste collected comprising aquaculture waste

such as rope offcuts. A total of 24 floats were collected from the Big Bay beach, with 19 floats recovered from the Outer Bay North beaches.

 Farm owners must ensure repairs of broken infrastructure are done and regular maintenance of their farms as a matter of utmost priority to ensure compliance with the operational guidelines outlined in the EA and the Environmental Management Programme (EMPr).

#### 3.3 ACTIVITIES IN THE ADZ — JUNE 2024

#### 3.3.1 FARM INSPECTIONS

On the 12 June 2024, the ECO team conducted on-water inspections for three Small Bay farms: Imbaza Mussels, West Coast Oyster Growers and Blue Ocean Mussels. A summary update of the general condition of the farms observed during June 2024 Audit:

- Most oyster rafts in good condition, although some maintenance work is required on other rafts.
- In general, long lines were taut and straight, most with suitably marked buoys. Some end floats had no/incorrect unique identifying markers.
- There was minimal biofouling on infrastructure.

#### 3.3.2 Pepper Bay Jetty

Operators are continuing to use pressure sprayers to remove the fouling organisms from inwater infrastructure equipment on the Pepper Bay Jetty. This results in fouling organisms being discarded back into the marine environment. This introduction of waste organic matter within the Small Bay environment may cause changes to physico-chemical conditions in the water, with potentially negative impacts on the marine environment. Furthermore, the sediment and shell waste has resulted in sedimentation next to Pepper Bay Jetty, decreasing the water depth next to the Jetty. This shallower water prevents vessels from coming alongside the Jetty at low tide and restricts aquaculture activities such as offloading harvested product. Land-based activities, including those described above, are excluded from the ADZ EMPr and EA. However, as these activities are linked to the operation of the ADZ and contravene other environmental legislation (e.g., Section 28 of NEMA, Duty of care and remediation of environmental damage). To identify possible solutions or an alternative practice, discussions within the AMC and between the DFFE Project Management Team and operators are ongoing.

A preliminary biowaste site inspection was conducted on the 24 April 2024 with the DFFE compliance officer, Bongumenzi Gumbi. It appears that only some farms are using the government jetty for wash-down activities, while all other farms were using their own facilities and discharging separately (some farms for example appear to be sending washdown water to stormwater systems, which may include biofouling). The ECO team send a list of the farms to Bongumenzi Gumbi for them to follow up about their waste management; no response yet (The ECO will follow up again). It must be ascertained if these farms are operating under a General Discharge Authorisation (GDA)/Coastal Waters Discharge Permit (CWDP) (as applicable) or not.

#### 3.4 SUMMARY OF COMPLIANCE WITH THE EA AND EMPR

In June 2024, 24 conditions of a possible 27 were auditable, which has been the case since June 2023 (Table 3.1). During the June 2024 audit period, the ADZ remained at an overall compliance score of 92%. Partial compliance remained at 8% and non-compliance at 0%. (Table 3.1, Figure 3.1).

Table 3.1. Compliance for April 2023 – June 2024.

Audit Date	Total Applicable Conditions	Compliance Percentage	Compliant	Partially Compliant	Non- compliant	Not Applicable
2023/06/15	24	83	20	4	0	3
2023/07/20	24	83	20	3	1	3
2023/08/08	24	83	20	3	1	3
2023/09/06	24	83	20	3	1	3
2023/10/13	24	83	20	4	0	3
2023/11/14	24	83	20	4	0	3
2023/12/06	24	83	20	4	0	3
2024/01/19	24	83	20	4	0	3
2024/02/02	24	92	22	2	0	3
2024/03/15	24	92	22	2	0	3
2024/04/18	24	92	22	2	0	3
2024/05/23	24	92	22	2	0	3
2024/06/24	24	92	22	2	0	3

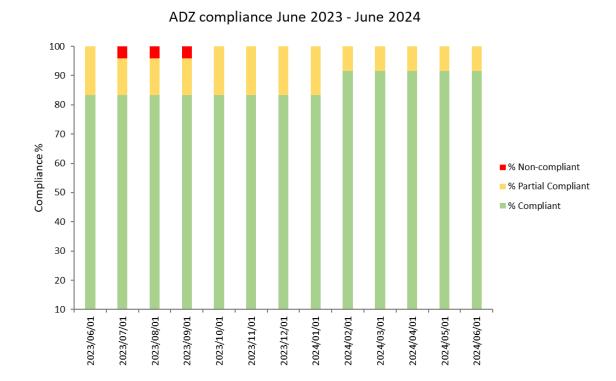


Figure 3.1. ADZ compliance for year 2/3 of ECO audits conducted by Anchor (June 2023 to June 2024).

#### 3.5 FARM MAINTENANCE PLAN FEEDBACK

#### 3.5.1 BLUE OCEAN MUSSELS

Blue Ocean Mussels (BOM) provided a farm maintenance plan on 20 July 2022 as requested by the ADZ ECO in response to non-compliances with the infrastructure guidelines reported during the June 2022 audit period. This plan to repair and rebuild dilapidated rafts, and to put each raft on its own mooring (per the operational guidelines) has been completed and was confirmed by the ECO team during the June 2024 site visit (Table 3.2).

Table 3.2. Maintenance progress for BOM, June 2024.

Maintenance item	Initial number	Number addressed	Total remaining
Restore raft	15	15	0
Maintain raft	20	20	0
Rebuild raft	4	3	0
Move to separate mooring	26	26	0

#### 3.5.2 REQUA ENTERPRISES

Non-compliances with the infrastructure and operational guidelines were observed on Requa Enterprises Outer Bay North (OBN) farm during the May 2023 site inspection. A meeting was held on the 26 January 2024 mainly to discuss challenges faced with line retrieval on their farm. The farm owners mentioned that they are unable to submit a maintenance plan because the sunken lines have not been retrieved. The timeframe they requested to stop looking for lines was end of June 2024.

At the time of drafting, Requa has been unable to locate their infrastructure in the water, as it appears to be either sunken or removed. Financial constraints have led Requa to cancel the lease agreement with Transnet National Ports Authority (TNPA). The matter has been turned over the ADZ management team.

#### 3.5.3 PLUTO MUSSEL TRADING

At the time of drafting, the progress of the maintenance requested from Pluto Mussel Trading as per the non-compliance letter was not adhered to and there has been no substantial feedback to date. A decommissioning plan was requested by 15 April 2024; however, no plan has been received despite numerous follow up attempts. Pluto have since stopped responding to all ECO communications, and the matter has been turned over the ADZ management team.

#### 3.5.4 MMMAGRI CONSULT

MMMAgri Consult's farm owner notified the ECO team and AMC representatives of the termination of their service agreement with Ocean Grown Aquaculture the 16 October 2023. The farm was issued a final Coastal Protection Notice (in terms of 59(1) of the National Environmental Management Integrated Coastal Management Act, 2008) by the DFFE on the 31 August 2023. Communication on 18 May 2024 was that they were still investigating what happened to the other lines, whether they are sunken or detached. There is no evidence to suggest the lines were stolen. A diver was sent, but nothing was recovered. An investigation of beach recoveries has also yielded no results. This farm was required to submit decommissioning plan by 15 April 2024. However, they expressed interest to not

decommission the farm and they applied for a permit renewal. The matter has been turned over the ADZ management team.

#### 3.5.5 XESIBE AQUACULTURE

Xesibe Aquaculture's permit expired on the 02 February 2023, and this farm is no longer under Ocean Grown Aquaculture. Xesibe no longer has a valid aquaculture permit, and a decommissioning plan was requested with a deadline of 15 April 2024. Xesibe Aquaculture have since stopped responding to all ECO communications, and the matter has been turned over the ADZ management team.

#### 3.6 FARM MONITORING REPORTS (FMRs)

Farm Monitoring Reports (FMRs) are completed and submitted by all operators prior to the 15th of the following month along with verification documentation (such as invoices or other means of tracking production). Each farm must submit a separate FMR for each farmed product and precinct in which they farm. As of 16 June 2024, 22 out of 25 FMRs were submitted within the expected timeframe, with three outstanding submissions (Table 3.3). While all farms with sales provided supporting documents, 12 farms reported no sales (Table 3.3). This means that, of the 22 farms that provided FMRs, 55% of farms are reporting no sales.

Table 3.3. FMR Submission status, supporting production verification documents and visual inspection logs. Late submissions, lack of supporting documents or non-provision of visual logs is highlighted in red.

Farm name	Location	Species	Date	Supporting docs	Visual Inspection Log
African Olive Trading	Inner Bay	Mussels	2024/06/14	yes	yes
Aqua Foods SA	Inner Bay	Mussels/oysters	2024/06/05	yes	yes
Aqua Foods SA	Big Bay	Mussels	N/A	A – not actively fa	rming
Blue Lagoon Products	Big Bay	Oysters	2024/06/14	no sales	yes
Blue Ocean Mussels	Inner Bay	Mussels	2024/06/06	yes	yes
Blue Sapphire Pearls	Big Bay	Mussels	2024/06/16	yes	yes
Blue Sapphire Pearls	Small Bay	Oysters	2024/06/16	yes	yes
CEX Enterprises	Big Bay	Mussels	N	/A – no active fari	ming
Imbaza Mussels	Inner Bay	Oysters	2024/06/10	yes	yes
K2019005713	Big Bay	Mussels	2024/06/14	no sales	yes
K2019005725	Big Bay	Mussels	2024/06/14	no sales	yes
Lagoon Aqua Farm	Big Bay	Mussels	2024/06/14	no sales	yes
Madima General Agriculture Trading	Big Bay	Mussels	2024/06/14	no sales	yes
Mika Growers	Big Bay	Mussels	2024/06/14	no sales	yes
MMMAgri Consult	Big Bay	Mussels	Outstanding at time of drafting		
Pluto Mussels and Trading	Big Bay	Mussels	Outstanding at time of drafting		
Requa Enterprises	North Bay	Mussels	N	/A – no active fari	ming
Saldanha Bay Oyster Company	Small Bay	Oysters	2024/06/14	yes	yes

Farm name	Location	Species	Date	Supporting docs	Visual Inspection Log
Saldanha Bay Oyster Company	Big Bay	Oysters	N/A – no active farming		
Salmar Trading	Inner Bay	Oysters	2024/06/14	yes	yes
Simunye Mussels	Big Bay	Mussels	2024/06/14	no sales	yes
Southern Atlantic Sea Farms I	North Bay	Mussels	2024/06/14	no sales	yes
Southern Atlantic Sea Farms 2	North Bay	Mussels	2024/06/14	no sales	yes
Southern Cross Salmon Farm	North Bay	Mussels	2024/06/14	no sales	yes
Ulwazi Kukutya	Big Bay	Mussels	2024/06/14	no sales	yes
Wada Projects	Big Bay	Mussels	N	/A – no active far	ming
Well Done Works	Big Bay	Mussels	N	/A – no active far	ming
West Coast Aquaculture	Inner Bay, Big Bay	Mussels/oysters	2024/06/14	yes	yes
West Coast Oyster Growers BB	Big Bay	Mussels/oysters	2024/06/14	no sales	yes
West Coast Oyster Growers SB	Small Bay	Oysters	2024/06/14	yes	yes
Xesibe Aquaculture	North Bay	Mussels	Outstanding at time of drafting		

#### 3.7 BEACH MONITORING BY OPERATORS

In September 2022, the Bivalve Shellfish Association of South Africa (BSASA) provided names of four members of the Aquaculture Industry who have committed to monitoring and cleaning beaches (Table 3.4). The ECO provided a feedback template to the volunteer operators to record waste volume estimates, dominant waste type and percentage of collected waste that comprises aquaculture debris. Beach clean-up feedback is provided the following month to ensure data for the entire month is captured.

Table 3.4. Members of Aquaculture Industry committed to beach monitoring and clean-up as required by EMPr conditions I and 2 of Table 7-1.

Responsible party	Group/affiliation	Precinct	Beach	Frequency
Wayne Maree	Aquafoods SA	D:= D (DD)	Spreeuwalle – Paradise	Twice a month
Mauritz Viljoen	Ocean Grown Aquaculture	Big Bay (BB)	beach	Bi-weekly
Mauritz Viljoen	Ocean Grown Aquaculture	Outer Bay North (OBN)	West and Eastern Beach	Monthly
Vos Pienaar	Imbaza Mussels	Small Bay (SB)	Small Bay Northern beaches (Hoedjies Bay to Mossgas)	Weekly
SJ Poggenpoel	Blue Ocean Mussels (BOM)	Small Bay (SB)	Marcus Island – SB side	Monthly

Waste data is provided for beach clean-ups for Small Bay, Big Bay and Outer Bay North. Detailed feedback has not been provided on Marcus Island to date, however photographic evidence was provided in September 2022, and due to the direction of the prevailing swell and current, minimal waste is anticipated to wash up on Marcus Island.

Overall, the waste collected from Small Bay beaches primarily consists of litter and general waste, with only a small portion originating from the aquaculture industry (Figure 3.2). In Big Bay, most of the waste collected from the beaches is composed of aquaculture floats, while a smaller portion is comprised of rope offcuts that are collected in refuse bags (Figure 3.2 and Figure 3.3).

The ECO received beach clean-up data for May 2024 for clean ups in Outer Bay North (North Bay), and Small Bay (the whole Northern Beach). Due to poor weather, the boat and crew couldn't access Spreeuwalle beach in Big Bay, but Langebaan Beach (at Donkergat, also in Big Bay) were cleaned instead. No floats were retrieved from the Small Bay beach, with a small fraction of the waste collected comprising aquaculture waste such as rope offcuts (Figure 3.2). A total of 24 floats were collected from the Big Bay beach, with 19 floats recovered form the Outer Bay North beaches (Figure 3.3).

There has been a notable improvement in the reporting of beach clean-up data in 2024, with data provided to the ECO for all three precincts (Big Bay, Small Bay and Outer Bay) each month since January 2024.

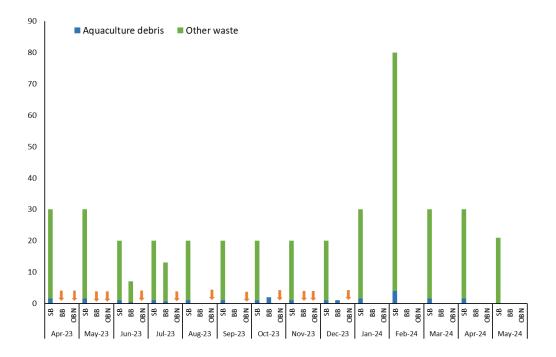


Figure 3.2. Refuse bags (containing waste) collected from beaches in the various precincts. Total waste collected and portion of waste constituting aquaculture debris is presented. The orange arrows an absence of reporting.

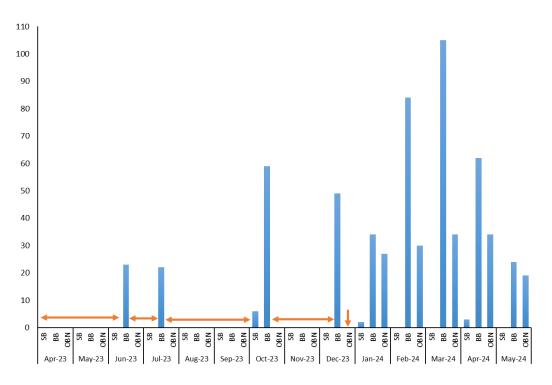


Figure 3.3. Floats collected from beaches in the various precincts. The orange arrows an absence of reporting.

#### 3.8 BEACH INSPECTION BY ECO

The ECO conducted a beach inspection in the Small Bay during the May 2024 audit. There The ECO conducted a beach inspection by boat along the Hoedjiespunt intertidal rocky shore beach (TNPA property) to the west of the BOM Small Bay site along the Marcus Island causeway. Floats, baskets and other aquaculture waste was observed along the beach (Figure 3.4). Unfortunately, no clear markings were visible that could be used to identify the farm of origin.



Figure 3.4. Small Bay (Marucs Island causeway) beach inspection.

#### 3.9 INCIDENTS

One incident was reported during the June 2024 audit at the time of the completion of this report. Two rafts (Raft P16 and P39) at BOM had been lashed together at the time of the ECO site visit on 12 June 2024 due to overnight strong winds. An incident report form was completed by the BOM team (IR - June24-01). BOM has notified the ECO that steps would be taken to rectify the situation (BOM is in the process of procuring mooring blocks and will provides update will be provided once the rafts have been separated).

The same incident report (IR - June24-01) also noted that strong winds and swirls knocked a small cap off raft P10's pontoon, causing it to slowly take in water and submerge lower. Water was pumped out of the pontoon and end cap was tightly sealed, and the incident has been fully resolved.

#### **4 ADZ MANAGEMENT**

#### 4.1 BAY USER SAFETY

It is the mandate of TNPA, who must ensure that the ADZ is accurately demarcated with South African Maritime Safety Authority (SAMSA) approved marker buoys (EMPr table 5-I, condition 2). (the DFFE has no control over this). To identify the required marker buoys for the ADZ, an Aids to Navigation (AtoN) Plan was developed (final draft submitted on 27 November 2022). The workshop for stakeholder engagement on the Navigational Risk Assessment required for the implementation of the AtoN plan was held on 11-12 October 2023. A Navigational Risk Assessment was conducted for Saldanha Bay, therefore, AtoN plan will be implemented in order to be rated compliant. Meetings were held on the 7 December 2023 and 8 March 2024 to further discussions are required to resolve the outstanding issues with TNPA.

#### 4.2 BIVALVE PRODUCTION VOLUMES

Graded production volumes in the ADZ are recoded monthly. Production volumes for March 2024 and cumulative production to date supplied by the Branch: Fisheries Management using the approved formula to calculate total ungraded production are presented in Table 4.1. Production is below the current limit of 15 000 tpa ungraded shellfish (7 500 tpa graded). Per the EA, bivalve production may be increased by an additional 5 000 tons annually but only if monitoring results indicate that the environment health has been maintained and impacts remain manageable.

Table 4.1. ADZ bivalve production (tons). The Approximate ungraded production is based on the conservative assumption that the ratio of ungraded to graded shellfish volume is  $\sim$ 2:1.

	Graded production						
ADZ Precinct	Monthly graded production May 2024	Feb 2019-Jan 2020 (Year I prod)	Feb 2020- Jan 2021 (Year 2 prod)	Feb 2021- Jan 2022 (Year 3 prod)	Feb 2022- Jan 2023 (Year 4 prod)	Feb 2023-Jan 2024 (Year 5 prod)	Feb 2024–Jan 2025 (Year 6)
Small Bay	266	2847	1936	2921	2621	3299	906
Big Bay	0	189	240	480	700	260	23
Outer North Bay	0	433	297	330	175	0	0
Outer South Bay	-	-	-	-	-	_	-
Total graded	266	3 468	2473	3731	3496	3558	929
Approximate ungraded production	504	6 497	4 707	7 228	6664	6633	1721

#### 4.3 ENVIRONMENTAL MONITORING

None to report.

#### **5 RECOMMENDATIONS**

#### **5.1 GENERAL RECOMMENDATIONS**

The following recommendations are made by the ECO for the consideration of Branch Fisheries Management.

- There appears to be some differing interpretations of the term "dormant line". The interpretation of the Aquaculture Management team is that a dormant line is a line that is installed in the water (and comprises mooring blocks, risers and top line) that it takes up physical space within the ADZ precinct but has no ongoing production. In contrast, some farms appear to interpret dormant lines as the total number of lines approved lines that are not in production (whether they are in the water or being stored on land). The ADZ management's understanding of what the term "dormant" means in this context has been communicated to farmers to ensure interpretations are aligned and facilitate correct reporting.
- It is recommended that the FMR be amended to include a space for the reporting of aquaculture infrastructure installed in the water, such as mooring blocks, that are not currently in production use.
- NatGro was previously accepting organic waste from the aquaculture industry for composting but have recently restricted acceptable waste due to odour complaints. Therefore, limiting industry's legal options for safe waste disposal. It is recommended that ADZ operators engage with NatGro Organics to identify their specific concerns for composting aquaculture biological waste and attempt to find a solution to these concerns. This matter was discussed in the operators meeting that was held on the 18 October 2023, unfortunately there was no resolution, the DFFE should ensure that the aquaculture industry finds a solution.

It must be ascertained if farms that are cleaning biofouling offsite and discharging to the marine environment are operating under a General Discharge Authorisation (GDA)/Coastal Waters Discharge Permit (CWDP) (as appliable).

- Navigational Risk Assessment is concluded, the AtoN Plan has been finalised, and TNPA is the mandated authority and should ensure implementation and execution of this plan. Further discussions between DFFE and TNPA are required to resolve the outstanding markers. Follow up discussion meetings were held on the 7 December 2023 and 8 March 2024.
- Monitoring progress with the maintenance plans should continue.
- While the main receiving beaches should continue to be included in ECO site inspections, opportunistic inspection of other beaches that may not receive as much attention (such as the Marucs Island Causeway shoreline on the Small Bay side) should also be monitored opportunistically.
- The DFFE: Fisheries Management should continue discussions within the AMC forum and with operators to determine a solution to the accumulation of sediment due to wash down activities on Pepper Bay Jetty. This matter was raised in the last AMC meeting (27 March 2023), and it was agreed that discussions between the Department

and Saldanha Bay municipality need to occur. However, this is needs to be taken by the DFFE's compliance department as this is their mandate.

- The ECO strongly recommends that the DFFE Project Management Team action a dive inspection to be conducted to assess the situation underwater in the Big Bay precinct. The overall conditions of the farms were primarily assessed based on observations from above the surface waters. However, it is imperative to assess the impact of all the sunken infrastructure beneath the waters and on the seafloor. The presence of sunken mussel lines has the potential to increase mussel dislodgement and cause scouring of the reef. Therefore, a thorough investigation is necessary to fully understand the implications of such infrastructure on the marine environment. A reef survey is scheduled to be commissioned in the current contract for specialist monitoring, and this will shed light on the matter.
- A reef survey is scheduled to be commissioned in the current contract for specialist monitoring, and this will shed light on the matter.

The following recommendations are made by the ECO for the consideration of Operators:

- Frequent cleaning of biofouling from lines and infrastructure should occur to reduce the risk of lines chaffing and breaking.
- Beach monitoring and removal of aquaculture debris should occur twice a month (minimally) to ensure that beaches are free of aquaculture debris.
- Monitoring and gathering data on Endangered, Threatened, and Protected (ETP) species should be considered a priority as it is a requirement for Marine Stewardship Council (MSC) accreditation which will aid in accessing European markets.
- The Operators must engage with DFFE: Compliance to assist in determining a solution to the accumulation of sediment due to wash down activities on Pepper Bay Jetty.
- Operators should attempt to determine collaborative solutions to the illegal wash-down practice occurring at Pepper Bay Jetty.
- Framers should take note that a "dormant line" means a line is a line that is installed in the water (and comprises mooring blocks, risers and top line) that it takes up physical space within the ADZ precinct but has no ongoing production.

#### 5.2 EVALUATION OF EMPR

In the opinion of the ECO, no changes should be made to the EMPr to ensure continued avoidance, management, and mitigation of environmental impacts. Furthermore, the ECO does not recommend changes to the EMPr to ensure compliance with the EA.

#### **6 CONSULTATIONS AND COMMUNICATIONS**

#### **6.1 CONSULTATIONS**

- I. Copies of comments received:
  - Communications register June 2024.
  - Documents register June 2024.
- 2. Information requested by the competent authority:
  - None.
- 3. Interviews, discussions, and other communications.
  - Site visit report on ADZ dormant lines email sent to ADZ management team. Resulting Clarification on "dormant lines" email sent to operators.

#### 6.2 COMMUNICATIONS

Communications received by the ADZ ECO during the June 2024 audit period are presented in Table 6.1 below.

Table 6.1. Individual, organization, and purpose of consultation during the May 2024 audit period.

Individual	Organisation	Subject
lmtiyaz İsmail	DFFE: Aquaculture Authorisations	Mariculture rights
Sisanda Dalasile	Saldanha ADZ ECO	Request for an Incident Response Leader for the ADZ project
Amy Wright	Saldanha ADZ ECO	Amended EA 2024 (14/12/16/3/3/1/1728/AM3) query
Amy Wright	Saldanha ADZ ECO	RE: Site visit report on ADZ dormant lines
Amy Wright	Saldanha ADZ ECO	Decommission plan required
Amy Wright	Saldanha ADZ ECO	Verification of Mussel Line Counts on K13 and K25 farm
Amy Wright	Saldanha ADZ ECO	Clarification needed on the Decommissioning Plan for K13 and K25 Lines
Michelle Pretorius	DFFE: Operation Phakisa Delivery Unit	RE: Mika FMR
Amy Wright	Saldanha ADZ ECO	Queries regarding May 2024 FMR data (Mika)
Amy Wright	Saldanha ADZ ECO	Site visit report on ADZ dormant lines
Imtiyaz Ismail	DFFE: Aquaculture Authorisations	Company name change: West Coast Oyster Growers to Ocean Grown Aquaculture



