forestry, fisheries & the environment

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

SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE ENVIRONMENTAL CONTROL OFFICER SUMMARY REPORT 32

November 2024

ANCHOR environmental

Anchor Research & Monitoring Report No. 2014/32_1c

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November 2024

Report prepared for:

Department of Forestry, Fisheries and the Environment
Branch: Fisheries Management

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ANCHOR environmental

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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	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

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

Box 1: Declaration of Independence of Environmental Control Officer

I, Francois André de Villiers 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.

12 December 2024

Box 2: Declaration of Independence of Reviewer

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.

12 December 2024

COMPLIANCE WITH REGULATION 34 OF THE EIA REGULATIONS, 2014

The National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) 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 2014 (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. 2. Ensure compliance with EA, EMPr and, in the case of a closure activity, the closure plan.	Section 5.2
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

1 INTRODUCTION

1.1 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 November 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), and DFFE: Chief Directorate Sector Compliance and Chief Directorate Sector Enforcement under Branch: Regulatory Compliance and Sector Monitoring.

2 THE SALDANHA BAY AQUACULTURE DEVELOPMENT ZONE

2.1 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, 1998 (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 1 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
Anchor Research & Monitoring (ARM)	Jen Keightley	April 2022 to May 2023
	Julia Ndou	June 2023 to May 2024
	Amy Wright	June 2024 to August 2024
	André de Villiers	August 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, with no appeals received to date. The original approved EMPr is dated August 2017 and has been amended three times in May 2020, June 2021, and June 2022. 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 years, ending 31 March 2025. 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). Note that there are two lease areas in OBN that are unallocated and have been advertised for lease applications by Transnet National 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.

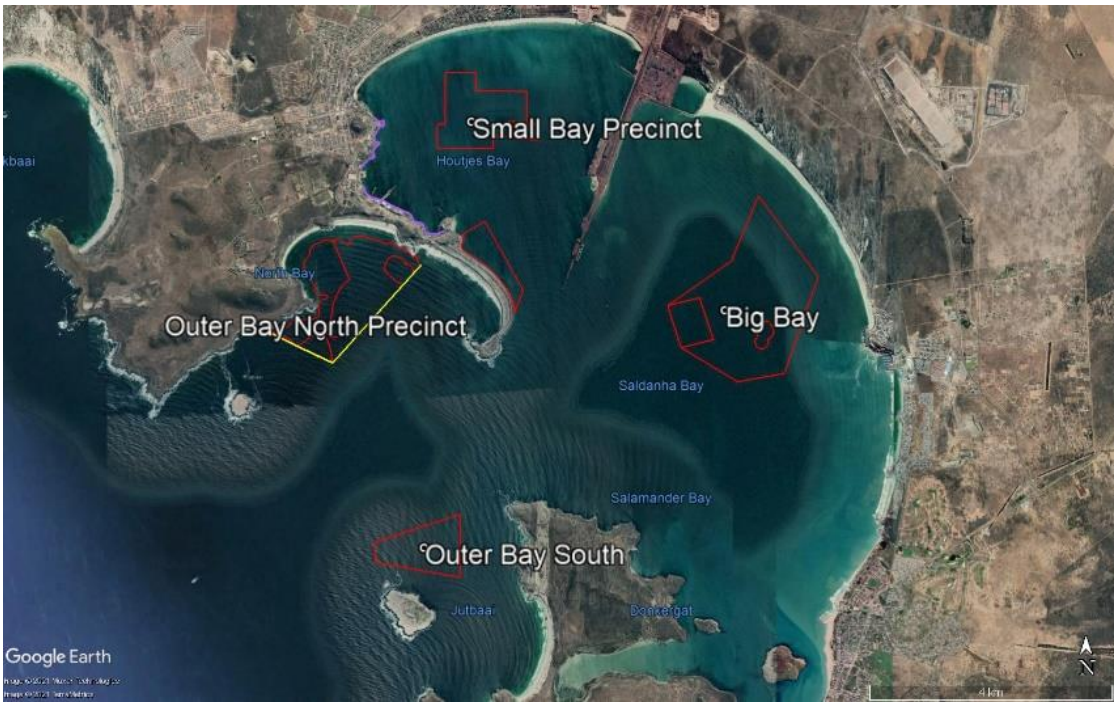

Figure 2.1. Saldanha Bay ADZ precincts.

Table 2.2. Scope for expansion in the ADZ.

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**

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 3rd 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
African Olive Trading 232 (Pty) Ltd	Mussels
AquaFoods SA (Pty) Ltd	Mussels/ oysters
Blue Lagoon Products (Pty) Ltd	Oysters
Blue Ocean Mussels (Pty) Ltd	Mussels/ Oysters
Blue Sapphire Pearls CC	Mussels / Oysters
Imbaza Mussels (Pty) Ltd	Mussels
K2019005713 (Pty) Ltd	Mussels
K2019005725 (Pty) Ltd	Mussels
Lagoon Aqua	Oysters
Madima General Agriculture Trading (Pty) Ltd	Mussels
Molapong Aquaculture (Pty) Ltd	Salmon
Mika Growers (Pty) Ltd	Mussels
MMMagriconsult (Pty) Ltd	Mussels
Pluto Mussels and Trading (Pty) Ltd	Mussels
Requa Enterprises (Pty) Ltd	Mussels
Saldanha Bay Oyster Company (Pty) Ltd	Oysters
Salmar Trading (Pty) Ltd	Oysters
Simunye Mussels (Pty) Ltd	Mussels
Southern Atlantic Sea Farms (Pty) Ltd	Mussels
Southern Cross Salmon Farming (Pty) Ltd	Mussels
Ulwazi Kukutya (Pty) Ltd	Mussels
West Coast Aquaculture (Pty) Ltd	Mussels/ oysters
Ocean Grown Aquaculture (Pty) Ltd	Oysters/ Mussels
Xesibe Aquaculture Project (Pty) Ltd	Mussels

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 and non-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 demarcate with South African Maritime Safety Authority (SAMSA) approved marker buoys (EMPr table 5-1, 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 11 - 12 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 were held on 7 of December 2023, 8 March 2024 and 19 August 2024, to discuss this matter. Discussion was also held with SAMSA on 21 August 2024 regarding the matter. However, discussions remain ongoing between the DFFE and TNPA to resolve the outstanding issues.
- Operators must remain compliant with maintenance and operational guidelines (EMPr table 5-1, condition 6).
- The AMC 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 2014/32_1b). The ECO received beach clean-up data for October 2024 for clean ups in Big Bay (Mykonos, Leentjies Klip, Blouwaterbaai and next to Beach Road), Small Bay (the whole Northern Beach and the Blue Bay lodge area), and Outer Bay North (North Bay). Two 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 47 floats were collected from the Big Bay beach and 59 floats were collected from the Outer Bay North beach.

- 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 — NOVEMBER 2024

3.3.1 FARM INSPECTIONS

On the 18 November 2024, the ECO team conducted on-water inspections of four farms in Small Bay and two farms in Big Bay. A summary update of the general condition of the farms observed during July 2024 Audit:

- Not all lines were straight and taught.
- Two lines were submerged due to high levels of biofouling.
- Several rafts were broken during rough seas and high winds.
- Unique identifying markers and line number was not present on the line markers or rafts, which makes the identification of farm infrastructure and lines challenging.
- All farms were compliant with the authorised numbers of lines/rafts in the water.

3.3.2 PEPPER BAY JETTY

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; The EA and EMPr only covers sea-based activities and does not address activities occurring on land. As such the cleaning of biofouling off site does not fall under the scope of the EA and EMPr. However, as a proactive measurement the AMC is in communication with relevant authorities in an effort to address this type of land-based challenges. It must be ascertained if these farms are operating under a General Discharge Authorization (GDA) /Coastal Waters Discharge Permit (CWDP). Internal discussions within the Department are ongoing.

3.3.3 DECOMMISSIONING

Decommissioning progress for five farms was provided on 20 June 2024. The proposed commissioning plan for one farm in Big Bay has been approved by the AMC.

3.4 SUMMARY OF COMPLIANCE WITH THE EA AND EMPR

In November 2024, 24 conditions of a possible 27 were auditable, which has been the case since June 2023 (Table 3.1). During the November 2024 audit period, the ADZ had an increased overall compliance score of 83%. Partial compliance decreased to 12.5% and non-compliance increased to 4.5% (Table 3.1, Figure 3.1).

Table 3.1. Compliance for August 2023 – November 2024.

Audit Date	Total Applicable Conditions	Compliance Percentage	Compliant	Partially Compliant	Non-compliant	Not Applicable
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
2024/07/25	24	92	22	2	0	3
2024/08/23	24	92	22	2	0	3
2024/09/17	24	87.5	21	3	0	3
2024/10/10	24	92	22	2	0	3
2024/11/18	24	83	20	3	1	3

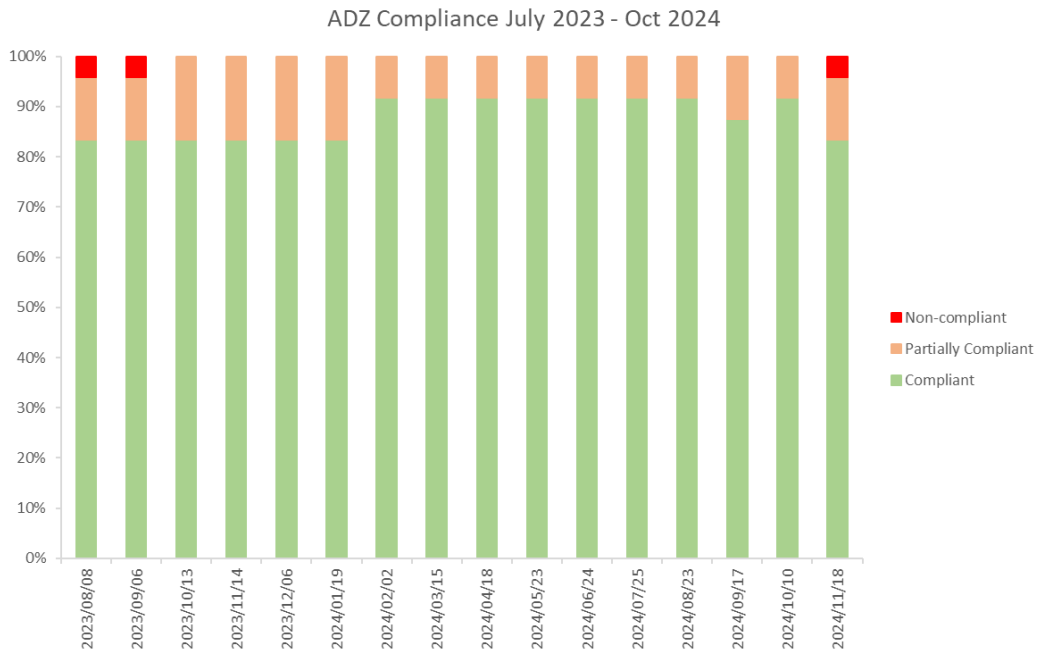

Figure 3.1. ADZ compliance for year 2/3 of ECO audits conducted by Anchor (August 2023 to November 2024).

3.5 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 22 November 2024, 19 out of 25 FMRs were submitted on time, with two submitted late and four still pending at the time of drafting (see Table 3.2). All farms with sales included supporting documents, while 10 farms reported no sales (Table 3.2). This indicates that roughly 50% of the 19 farms that submitted FMRs reported no sales.

Table 3.2. 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	Visual Inspection Log	Notes
African Olive Trading	Inner Bay	Mussels	2024/11/14	yes	
Aquafoods SA	Inner Bay	Mussels/oysters	2024/11/15	yes	
Aqua Foods SA	Big Bay	Mussels	N/A – not actively farming		
Blue Lagoon Products	Big Bay	Oysters	2024/11/15	yes	
Blue Ocean Mussels	Inner Bay	Mussels	2024/11/11	yes	
Blue Sapphire Pearls	Big Bay	Mussels	2024/11/14	yes	
Blue Sapphire Pearls	Small Bay	Oysters	2024/11/14	yes	
CEX Enterprises	Big Bay	Mussels	N/A – not actively farming		
Imbaza Mussels	Inner Bay	Mussels	2024/11/14	yes	
K2019005713	Big Bay	Mussels	2024/11/14	yes	
K2019005725	Big Bay	Mussels	2024/11/14	yes	
Lagoon Aqua Farm	Big Bay	Mussels	2024/11/15	yes	
Madima General Agriculture Trading	Big Bay	Mussels	2024/11/18	yes	
Mika Growers	Big Bay	Mussels	2024/11/14	yes	
MMM Agriconsult	Big Bay	Mussels	2024/11/20	yes	
Pluto Mussels and Trading	Big Bay	Mussels	Outstanding at time of drafting		
Requa Enterprises	North Bay	Mussels	N/A – not actively farming		
Saldanha Bay Oyster Company	Small Bay	Oysters	2024/11/14	yes	
Saldanha Bay Oyster Company	Big Bay	Oysters	N/A – not actively farming		
Salmar Trading	Inner Bay	Oysters	2024/11/14	yes	
Simunye Mussels	Big Bay	Mussels	Outstanding at time of drafting		

Farm name	Location	Species	Date	Visual Inspection Log	Notes
Southern Atlantic Sea Farms 1	North Bay	Mussels	2024/11/14	yes	
Southern Atlantic Sea Farms 2	North Bay	Mussels	2024/11/14	yes	
Southern Cross Salmon Farm	North Bay	Mussels	2024/11/14	yes	
Ulwazi Kukutya	Big Bay	Mussels	Outstanding at time of drafting		
Wada Projects	Big Bay	Mussels	N/A – not actively farming		
Well Done Works	Big Bay	Mussels	N/A – not actively farming		
West Coast Aquaculture	Inner Bay, Big Bay	Mussels/oysters	2024/11/14	yes	
Ocean Grown Aquaculture BB	Big Bay	Mussels/oysters	2024/11/14	yes	
Ocean Grown Aquaculture SB	Small Bay	Oysters	2024/11/14	yes	
Xesibe Aquaculture Project	North Bay	Mussels	Outstanding at time of drafting		

3.6 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 3.3. The beaches of each precinct, and the frequency, that is monitored and cleaned as required by EMPr conditions 1 and 2 of Table 7-1.

Precinct	Beach	Frequency
Big Bay (BB)	Spreeuwalle – Paradise beach	Twice a month
		Bi-weekly
Outer Bay North (OBN)	West and Eastern Beach	Monthly
Small Bay (SB)	Small Bay Northern beaches (Hoedjies Bay to Mossgas)	Weekly
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 and Outer 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 October 2024 for clean ups in Big Bay (Mykonos, Leentjies Klip, Blouwaterbaai and next to Beach Road), Small Bay (the whole Northern Beach and the Blue Bay lodge area), and Outer Bay North (North Bay). A small fraction of the waste collected on Small Bay beach comprised of aquaculture waste such as rope offcuts (Figure 3.2). A total of 151 floats were collected from the Big Bay beach and 20 floats were collected from the Outer Bay North beach (Figure 3.3).

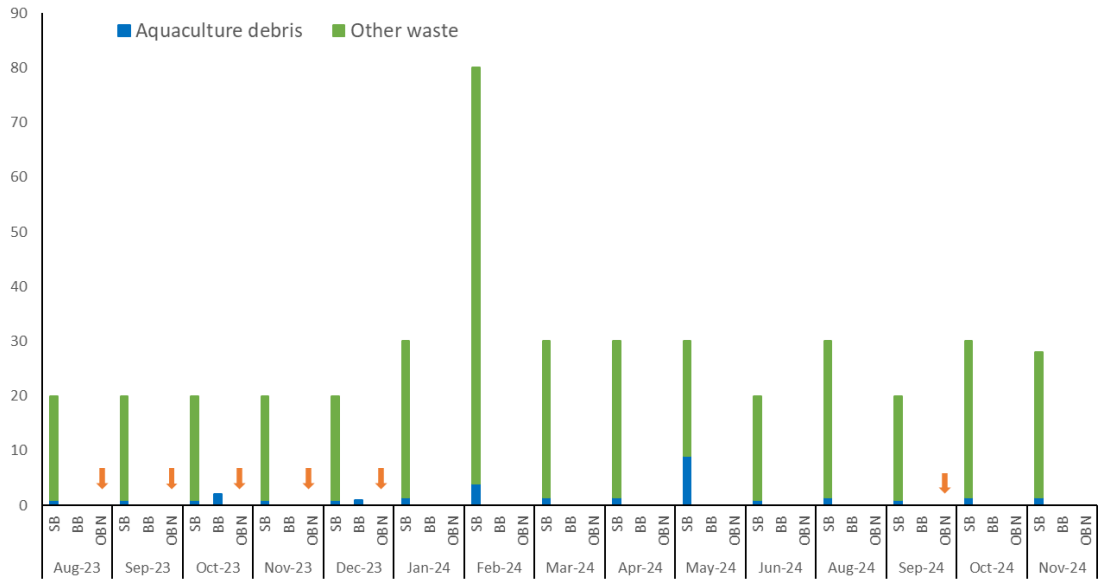

Figure 3.2. Refuse bags (containing waste) collected from beaches in the various precincts. Total waste collected and portion of waste constituting aquaculture debris is presented. The orange arrows an absence of reporting.

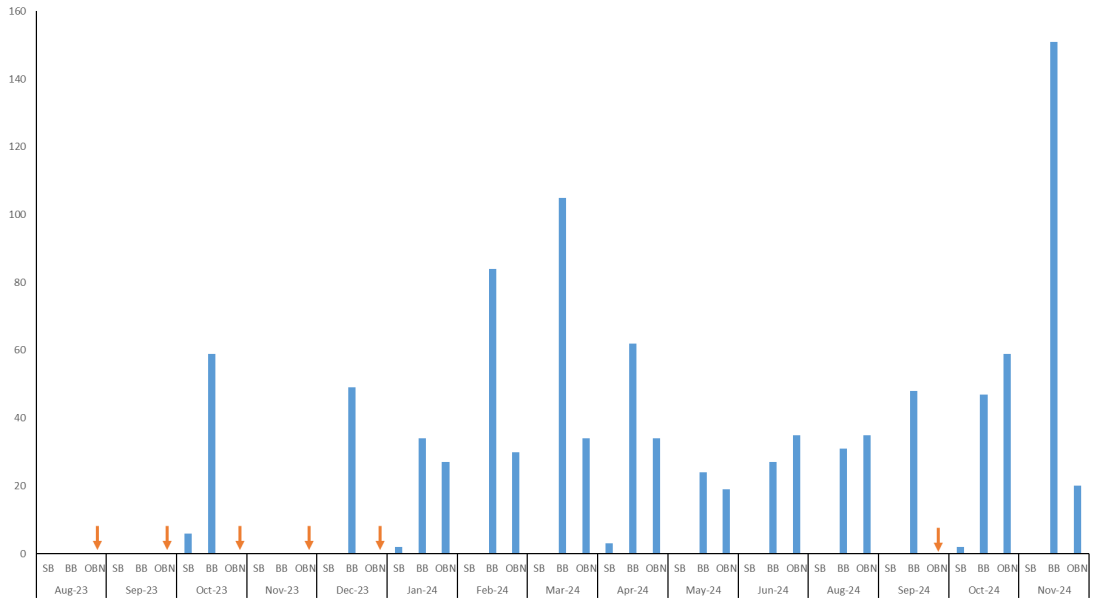

Figure 3.3. Floats collected from beaches in the various precincts. The orange arrows an absence of reporting.

3.7 BEACH INSPECTION BY ECO

The ECO conducted an opportunistic inspection of the Marcus Island form the sea and Spreeuwalle (Figure 3.4). A few crates and a single buoy were seen on Marcus Island beach (Figure 3.5). There was a high number of buoys seen on Spreeuwalle beach with some of them washed in between the crevices which will make removal difficult (Figure 3.6). Operators have been informed, and a request has been made to remove this waste.

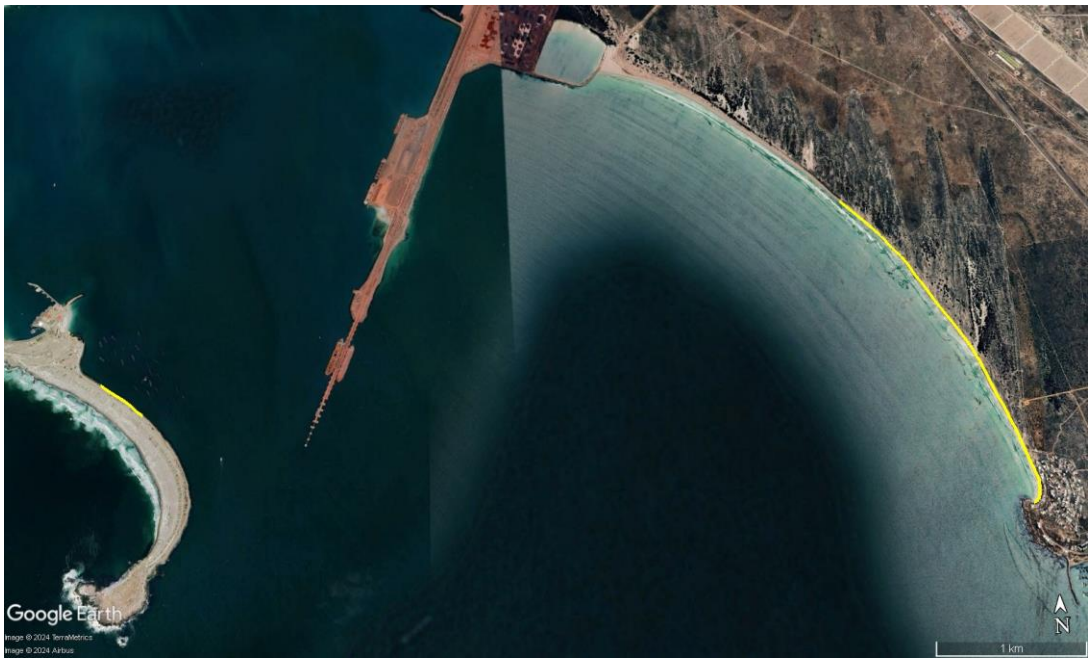

Figure 3.4: The sections of beach that was inspected (indicated in yellow). The areas included a section of the Spreeuwalle beach and a section the Marcus Island beach during the November 2024 site visit.

Figure 3.5: Crates and a buoy witnessed on the Marcus Island beach during the November 2024 site visit.

Figure 3.6: A subset of the aquaculture debris encountered during the beach inspection of Spreeuwalle during the November 2024 site visit.

3.8 INCIDENTS

One incident occurred after the previous reports were completed for the October 2024 audit period, and two incidents occurred during the November 2024 audit period. All of these are summarised below, so as to provide feedback on the status of these incidences as of end November 2024.

During a farm inspection, a skipper noticed that the top line was loose (IR – Oct 24-02). Upon further investigation, it appeared that the riser had broken, causing the topline to become loose. There were still mussels on the line, so it was repaired and re-anchored. Once the mussels are harvested, the line will be inspected again.

During rough sea conditions and high winds, two rafts were damaged, loosening the beams and purlins (IR – Nov 24-02). The rafts remain fastened and secure, and repairs are estimated to happen in December 2024. Although this incident occurred in August 2024, it was not reported to the ECO at that time.

During high winds and rough seas, three rafts came loose from their mooring blocks and had to be lashed together with other rafts (IR – Nov 24-03). One of these rafts collided with another, causing damage and resulting in the raft taking on water and partially sinking (IR – Nov 24-03). Efforts to pump the water out of the partially sunk raft have begun, while the rafts remain lashed together, awaiting further repairs.

One incident occurred during the October 2024 audit period. During rough sea conditions, the chains on one side of four lines in Big Bay came loose from their mooring blocks (IR – Oct 24-01). The toplines were removed from the water, and repairs are currently underway.

Four toplines in Small Bay broke free from their mooring blocks in July 2024. Two of these lines have been restored and are operational again, but the remaining two lines still require repairs (IR – Aug 24-01). . The ECO followed up on 23 September 2024, 15 October 2024, and 26 November 2024 to determine whether the remaining two lines had been reinstated. The two lines have been removed from the water, and the team is awaiting mooring blocks before the lines can be returned to the water.

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 5-1, 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 7 of December 2023, 8 March 2024 and 19 August 2024, to discuss this matter. DFFE held discussions with SAMSA on 21 August 2024 regarding the matter, and these discussions are ongoing

4.2 BIVALVE PRODUCTION VOLUMES

Graded production volumes in the ADZ are recorded monthly. Production volumes for September 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 ~2:1.

		Graded production					
ADZ Precinct	**Monthly graded production October 2024**	**Feb 2019-Jan 2020 (Year 1 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	160	2847	1936	2921	2621	3299	1718
Big Bay	15	189	240	480	700	260	163
Outer North Bay	0	433	297	330	175	0	0
Outer South Bay	-	-	-	-	-	_	-
Total graded	**175**	**3 468**	**2473**	**3731**	**3496**	**3558**	**1882**
Approximate ungraded production	333	6 497	4 707	7 228	6664	6633	3515

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.

- 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.

- 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, SAMSA and TNPA are required to resolve the outstanding markers. Follow up discussion meetings were held on the 7 December 2023, 8 March 2024, 19 August 2024 and 21 August 2024, and discussions remains ongoing.

- 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 Marcus Island Causeway shoreline on the Small Bay side) should also be monitored opportunistically.

- An inspection of the of the seabed next to Pepper Bay Jetty and 50m inshore was done to determine the effect of the accumulation of aquaculture waste being washed down on the jetty. During the inspection it was found that there was no sign of anoxia at either site. The only potential issue which was flagged was the accumulation of oyster shells next to the jetty which could have an effect on docking practices. It was suggested that drenching the area of the shell build up should restore the area to the desired water depth and will have a positive effect on the macrofaunal communities.

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.

- Currently only a single operator still uses the Pepper Jetty for wash down operations. The Operator 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.

- 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*.
- Operators must notify the ECO two weeks prior to any changes are made to infrastructure. A two-week notice period prior to any changes is stipulated as per condition 37 of the approved EA.

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

1. Copies of comments received:
   - Communications register November 2024.
   - Documents register November 2024.
2. Information requested by the competent authority:
   - None.
3. Interviews, discussions, and other communications.
   - None

6.2 COMMUNICATIONS

The ADZ ECO received communications from three different stakeholders the November 2024 audit period.

forestry, fisheries
& the environment

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